MANUFACTURING CONFECTIONER

Vol. XIV

AUGUST, 1934

No. 8

CONTENTS

Editorials	14
SUGGESTED DRY ROOM FOR CREAMS, JELLIES, MARSHMALLOWS	16
RESALE PRICE CONTROL IS JUSTIFIED	17
"SELLING BELOW COST" RULES IN THE CODE. George F. Brewer	19
ROLLED CREAM CENTERSJames A. King	22
GELATIN-ITS USE IN MARSHMALLOW WORKF. E. Robinson	26
PLANT EFFICIENCY	28
STATE OF EMERGENCY IN JOBBING TRADE	
VARIOUS STARCHES-VARIOUS USESGeorge E. Corson	32
Possibilities of Cane Sugar in CandyDr. Whitman Rice	34
SOUTHERN WHOLESALERS LINE UP UNDER CODE AT CONVENTION	36
THE CANDY CLINIC—SUMMER CANDIES AND PACKAGES	38
THE CANDY MAN'S CALENDAR	41
DIGEST OF TECHNICAL LITERATURE	42
SALESMEN'S SLANTS	44
THE MAIL BAG	46
WITH THE ASSOCIATED INDUSTRIES	48
Patents	60
BUYER'S GUIDE	5
CLASSIFIED ADVERTISING	62
INDEX TO ADVERTISERS	66

Statements and opinions offered in this magazine are not necessarily indorsed by the Editors and Advisory Editors or by the publishing organization with which they are affiliated. The author who signs an article assumes full responsibility for the statements which it contains.

Published Monthly on the 15th by

THE MANUFACTURING CONFECTIONER PUBLISHING COMPANY

222 North Bank Drive (Merchandise Mart), Chicago, Illinois. Phone Superior 9777. 15 Park Row, New York City, N. Y. Phone Barclay 7-1157

Founder-E. R. Allured

Publisher and Business Manager-Prudence M. Allured

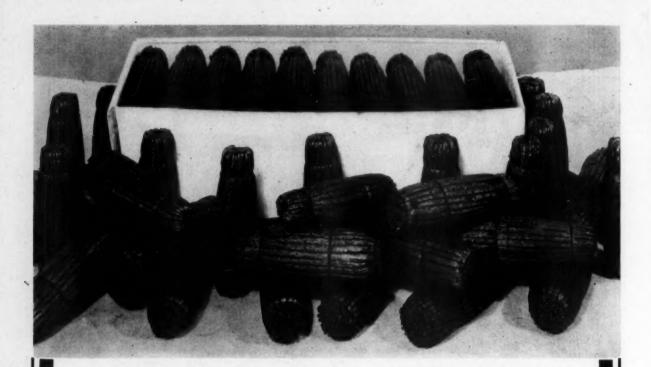
Advertising Manager-R. W. Wilmer

Editor-N. I. Gage

Western Representative—Edward S. Townsend, 1112 Hearst Building, San Francisco, California. English Representative: L. M. Weybridge, Members Mansions, 38 Victoria St., London, S. W. 1

Subscription Price: One Year, \$3.00; Two Years, \$5.00; Canadian, \$3.60; Single Copies, 50c

Vol. 14. No. 8. Entered as Second-Class Matter October 24, 1922, at the Post Office at Chicago, Illinois, under the act of March 3, 1879, Published Monthly. Subscription Price #3.00 Annually. Coprighted 1934 by The Manufacturing Confectioner Publishing Co., Inc.



"D & O" and VANILLA ARE INSEPARABLE

In the Bourbon Islands and in Mexico, Tahiti, Java and wherever else vanilla grows the "D & O" is as well known and cherished as in the United States where hundreds of consumers of Vanilla have constantly covered their needs from our stocks year after year for nigh a century. It was over 60 years ago when "D & O" first offered this delicate flavoring material to the industry and today this house ranks amongst the very few largest distributors of Vanilla in the world.

We solicit your orders.

DODGE & OLCOTT COMPANY 180 VARICK STREET NEW YORK, N. Y.

Branches: CHICAGO . ST. LOUIS . BOSTON . PHILADELPHIA . LOS ANGELES

"The integrity of the house is reflected in the quality of its products"



Bu

pri

HAN

Bausman Disc Ma Lehman Lehman, Conges, Bausman National Lehman

Fanners Burns (Burns (Lehman Lehman

National National

Nationa Natl. P

Nationa

Nationa Lehman

double 4 pot C

Nationa 500 lb.

Woodby Bar Wi

Anders

type, m Lehman

Carey (Lehman Powder

which

AN

OR

CON

Business our Money with



Buy guaranteed

UNION

at less than half original

price to reduce your costs and make PROFITS!

HANDY CHOCOLATE **EOUIPMENT**

"Plant Still Set Us."

Bausman Battery Combination of four Disc Machines, with Kettles.

Lehman 5-Roll Refiner, motor driven Lehman, 3200-lb. cap. close coupled Conges, type 400 A, motor driven.

Bausman Liquor Process Machines. National, 36" Triple Mills.

Lehman, late style, Crackers and Fanners, type DS 88.

Burns Cocoa Bean Cleaner.

Burns Coal Roaster.

Lehman Dust Cleaner.

Lehman Germ Separator.

National, 6 ft. Melangeurs.

National, 9 ft. Chasers.

National 10-lb. Weighing Machine. Natl. Plain and Nut Bar Depositors.

National Shaking Tables.

National Cold Box.

Lehman Cold Boxes, single and double deck.

4 pot Conges, Lehman and National. National 3 and 5 Roll Refiners.

500 lb. to 2000 lb. Chocolate Melters. Woodburn & O'Neil Sugar Mills.

Bar Wrappers, all sizes.

Anderson Expeller, Roller Bearing type, motor driven.

Lehman, 12-pot, Cocoa Press.

Carey Cocoa Presses, late style.

Lehman, fully automatic, Cocoa Powder Outfit.

LOW!

Recent liquidations have given us an excellent stock of candy and chocolate machinery at very low prices.

We have 2 warehouses-100,000 square feet of storage space and a farflung organization constantly buying up available equipment at prices which enable us to turn them over to you at a tremendous saving.

We employ expert machinists to go over every machine and put it in condition for your use.

We can usually serve any and all requirements on an instant's notice, thus many times saving you weeks of delay.

IOUIDATION

PITTSBURGH, PA. CHARLES ADAMS CO. LANCASTER, PA.

24" National Equipment Enrober, late style, motor driven, with automatic temperature control and Cooler and Packer. 300-500-1,000-lb. Chocolate Melting Ket-

300-500-lb. double-arm Chocolate Paste

25-50-gallon Caramel and Nougat Mixing Kettles.

White Caramel Cutters and Sizers.

Mills Nougat Cutters.

Springfield Syrup Cooler and Cream Beater.

Ball and Dayton Cream Beaters, 4-ft.-5-ft.

Springfield, E-B Cream Breakers, 50-gal.

Savage and National Marshmallow Beaters. Standard Starch Trays.

Racine Depositors.

Springfield Mogul Machines with Pumps. 16" National Equipment Enrobers with Automatic Feeders, Bottomers, Kihlgren Strokers and Coolers and Packers.

Racine Hand Printers. 500-lb. Vacuum Cooker.

Racine Sucker Machines with special rollers.

York Batch Rollers.

Hildreth Pulling Machines.

Dern Cutters.

Water-cooled Slabs.

Model K Kiss Machines.

Mills Drop Machines. Gas Furnaces.

Revolving Pans.

Lambert Peanut Roaster and Blancher.

Complete factory equipment.

Let us show you through these most modernly equipped plants. Our representative is always on the premises, at your service.

which we have for sale from recent liquidations.

AND CHOCOLATE MACHINERY

OR PRICES AND DETAILS

ERY CO., INC.

318 · 322 LAFAYETTE ST.,

CONFECMACH



An Example of Establishing Resale Prices

NUMBER of candy manufacturers have considered the wisdom of establishing definite resale prices for their products and have indicated their favor of such a policy. As discussed editorially in the June issue of The Manufacturing Confectioner, a manufacturer is legally permitted to set a resale price for his merchandise and enforce it if he conforms to the provisions of the law.

These provisions briefly are that he must enforce his resale price policy individually, without the use of cooperative action. He is privileged to refuse to sell whomever he pleases, for whatever reason he chooses. But he can not enter into an agreement with other manufacturers nor with his customers that certain resale prices be observed. He cannot request customers to report violations of his resale price policy, but a customer of his own accord may report a violation by a competitor if this is done without the solicitation of the manufacturer.

If ten to fifteen manufacturers of this industry would adopt such a plan, individually, it would soon put a stop to jobber price demoralization. Manufacturers would no longer be supporting the destructive price-cutters who are making business unprofitable for the majority of their distributors.

Why can't the candy industry do as well as the tobacco industry in solving this important problem?

All three Tobacco Codes contain a "cigar merchandising" plan whereby the manufacturer establishes the retail price of his product, and which regulates trade discounts at different stages of cigar distribution. The plan was originated by the retail dealers and was proposed by them to the wholesalers and cigar manufacturers. At the Code public hearings it was supported by these three groups. It was also approved by the Consumers' Advisory Board, Industrial Advisory Board, and Legal Division of NRA.

Tobacco manufacturers have long had a custom of declaring intended retail prices, and the internal revenue taxes on cigars have been computed on such a basis. Their present resale plan is based on this custom but free competition between manufacturers continues.

The cigar manufacturers are required to file with the council representing the three industries the minimum sales price of such cigar at retail. That price is to be used in computing discounts, and each container must bear that retail price prominently displayed. Accordingly, retailers must sell cigars at not less than the manufacturer's indicated price.

This plan permits each manufacturer to make the best possible cigar in each price class. It likewise eliminates the "long shot" cigars, induced by excessive discounts to distributors, and eliminates the sale of cigars as "loss leaders."

These same benefits could accrue to the candy industry if the confectionery manufacturers would individually establish and enforce their resale price policies. Read what E. J. McCoy, State President of Ohio Wholesale Confectioners' Association, has to say on the jobbers' viewpoint elsewhere in this issue of The Manufacturing Confectioners.

Increase Advertising

N interesting commentary on the progressive policies of certain prominent candy manufacturers is seen in their announcements during recent months of plans for increased advertising programs.

A few days ago, the company considered the leading advertiser of the industry announced its intention of taking the fullest possible advantage of the anticipated upswing in business by substantially increasing its advertising. This concern has risen to its national prominence largely by its persistent advertising throughout the years, of course backed by quality merchandise.

Ideas are contagious and, as these firms have demonstrated, the incessant repetition of their advertising message has proved the surest and shortest path to leadership.

Where the Buyer Comes In

N undermining influence which is detrimental to Code compliance in many industries, and which may prove a boomerang to the confectionery industry, if practiced, is the adverse attitude and destructive purchasing tactics of many buyers. In numerous cases it is said they are practically refusing to purchase on the established terms which enable their suppliers to conform with the Code of the industry to which they belong. Therefore the company that gets the business of these buyers must be a chiseling price-cutter.

We wish to call attention to the necessity of both the buyers and sellers cooperating in order to make the Codes of various industries a success. Much emphasis today is being placed upon the requirement of Code compliance by the seller, but sound business firms should not overlook the responsibility of their buyers toward compliance with the fair trade practice rules of the industries which they patronize. Many months have been spent in preparing suitable Codes for the improvement of business conditions. As the President has repeatedly declared, the success of the Codes in accomplishing their objectives rests upon the cooperation of firms within each industry and coordination among all industries.

When Codes were first adopted, most everyone complied because of fear of swift and unsparing punishment. But under the pressure of competition and higher costs, a few sellers began to "slip over a fast one" now and then to see if they could "get by." They succeeded. Soon these sellers were making a practice of price-cutting wherever necessary to make sales, and some buyers encourage it.

Then these buyers began demanding cutprices on all purchases, pitting sellers against sellers, in order to obtain the lowest possible prices, regardless of the Code of the sellers' industry. This situation has reached a stage which may demoralize several industries.

Under these conditions, consider the plight of the reputable sellers, many of whom are manufacturers and suppliers of materials and equipment for the confectionery industry, who are standing pat on their Codes, endeavoring to sell on the merits of their products, without meeting the cut-prices of their competitors. Obviously, they suffer the loss of various amounts of business due to the demands of chiseling buyers who persistently claim that they can buy at "better prices."

Instances are known where it has been much to the detriment of a reputable supplier to have reported recalcitrant competitors to the Code Authority. The recalcitrant who was reported has thus been forced to desist from his unfair practices of favoring the chiseling buyer. This has displeased the buyer, and caused him to turn against the supplier who has complied with his Code and reported his violating competitor.

Such tactics are not only unpatriotic but are in violation of the fair trade practice rule which prohibits purchasing from sellers who fail to comply with their own Code. These buyers are also tying a noose around their own necks, for the vicious cycle of price-cutting is contagious. It unstabilizes markets, discriminates between buyers, and induces sellers to cut values proportionately in order to make up their losses.

Fortunately, there is another side to the picture. Many firms are showing evidence that they will not tolerate these practices on the part of their buyers, and many buyers also realize the fallacy of outright chiseling.

If the candy industry wants its Codes to function, its members should be consistent and do their buying on reasonable terms which will enable their suppliers to make a fair profit and comply with their own Codes. Prosperity cannot prevail until the majority of firms are operating profitably.

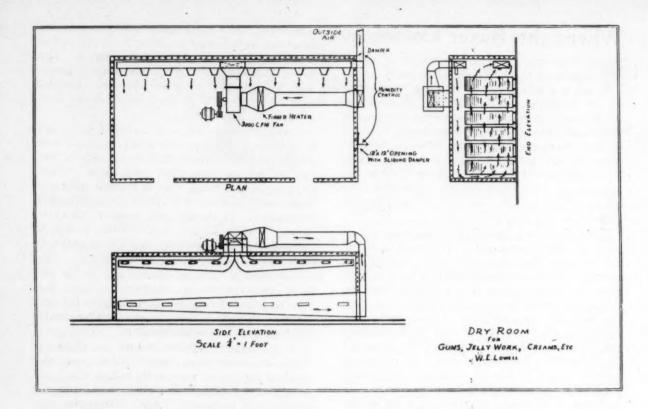
Gum Drops and Salt Tablets

EWSPAPERS in many cities last month carried a story released from Pittsburgh, Pa., telling how gum drops, salt tablets, and cold water given to workers aided them in withstanding the terrific heat in the Allegheny Steel Company's Brackenridge mills.

Gum drops, it was stated, supply sugar, which is the body's chief source of energy. The salt tablets furnish saline fluid to replace the salt lost by excessive perspiration. Hard work in hot weather uses energy rapidly, Dr. M. W. Heilman, the company physician was quoted as saying. So when workers feel enervated they are given gum drops to renew their supply of sugar.

It was revealed that the Brackenridge plan of fighting the heat was started several years ago by Dr. Heilman, and that it has been so effective that the plant has not had a serious case of heat prostration in three years.

Here is further evidence of the health and energy building values of candy, which the candy industry has known and advocated for years. Every candy salesman will want to "cash in" on this story—and particularly in its proof of the need of candy in the summer diet.



Suggested Dry Room for Creams, Jellies, Marshmallows

HE accompanying plan and suggestions on the problem of how often the air in the drying room for gums, jellies, marshmallows, creams, etc., should be changed, and the type of equipment suitable for the purpose, are presented for manufacturers interested in improvements of this nature.

This plan has proved very effective in a number of candy plants throughout the country. The details and similar information were worked out by an authority on air conditioning in the industry on the contributing staff of The Manufacturing Confectioner and recently supplied upon the request of another manufacturer confronted with this problem.

The drawing itself is sufficiently explanatory to give an idea of the method of air distribution.

The duct arrangement applies only to heating. Cold air ducts can be hooked into supply and return for soft marshmallows and creams.

Humidity control for drying work is brought about by operation of the damper in the outside air duct and sliding the damper in position at one end of the dry room. To increase humidity, both dampers should be shut. To reduce humidity, both dampers should be wide open. By adjusting these dampers, one can soon determine how far they should be open for each product.

Drying Temperatures and Time

The drying temperatures and length of time in the dry room for the various items mentioned above are given as follows:

GUMS: Temperature, 130° to 150° F. Start with low temperature and high humidity for the first 12 hours. Gradually decrease humidity and increase temperature. Time out of starch, 36 hours.

JELLIES: Temperature, 110° to 130°. Apply the same rule as above. Time out of starch, 18 hours.

MARSHMALLOWS (hard marshmallows, such as bananas): Temperature, about 110° for 24 hours.

MARSHMALLOWS (soft marshmallows): Temperature, 72°, with 50% to 55% relative humidity. Time out of starch, 8 hours.

CREAMS: Temperature, 40°. Time out of starch, 2 hours.

Further information as to the proper air movement for dry rooms of various sizes will be given upon request as a service to subscribers of The Manufacturing Confectioner who may have this problem under consideration.

Circulated air per minute and the size of heater for a given room depends upon its size.

Speaking for the Jobbers -

Resale Price Control Is Justified

Says E. J. MCCOY

Pres., Ohio Wholesale Confectioners' Assn.

A Discussion Prompted by Editorial in The June Manufacturing Confectioner

T such a time as this when we are all carefully examining and analyzing fundamental business practices related to our industry and our prospective fields of operations, it is imperative that we give attention to every phase of endeavor and every operation we pass through in discharging these functions. Not the least of these situations which we are compelled to face, whether we like it or not, is the matter of price resale control. Several questions immediately arise which we must answer, either out of our own experience or through sources of technical advice which are available to us.

Among these questions we find the following: Is such a policy legal? Is it practical? What are the disadvantages? What are the advantages? Will moves of this kind jeopardize distribution or the industry at large in any way? We can only be justified in contemplating moves of this kind to the extent to which these important questions may be answered.

Such a policy I am advised is legal. It can follow a declaration by a manufacturer as an individual. Every manufacturer in the country has a constitutional right to sell whom he pleases as long as such sales are not influenced by coercion or collective agreements with other producers. As long as he continues to act as an individual, he can control the resale price of his product and can name his own distributors.

Would Increase Distribution

Nothing will stir the jobbers' selling interest quicker than a pronounced policy by a manufacturer which indicates that his merchandise not only challenges the field for quality and appearance, but has back of it a merchandising program which is built for the welfare of distributor and consumer alike. Such a policy reaches directly into the jobber's selling organization, stirs the enthusiasm of the salesmen, touches retail outlets directly, and in turn the retailer will go out of his way to recommend such products to the consumer. Much desired distribution can be obtained almost automatically if all else is right. Follow up of original placements is ensured by the enthusiasm of the distributor and his organization.

This matter of distribution is of primary importance to every producer of candies. Sometimes it becomes a costly practice and without satisfactory results. If the right channels of approach are properly cultivated, it is reasonable to assume that a tremendous economy can be effected. We have some outstanding examples of such practices at the present time. But who is interested in merchandise which becomes the target for unethical methods of distribution?

♦ Support of the distribution trade will go to manufacturers who establish definite resale price policies, to control destructive price cutting, declares this Jobber State President who was prompted to prepare this discussion by an editorial on the subject in the June issue of Manufacturing Confectioner.

Legally, a manufacturer may set a resale price for his own product and enforce it if he conforms with the law. He may refuse to sell whomever he pleases. But he must enforce his resale price individually. He may not use cooperative action—either with other manufacturers or in agreement with his customers—that resale prices be observed.

Whereas manufacturers may not collectively establish and enforce a resale price, they may do so individually.

Salesmen Would Be Stimulated

Will the field of operations be limited? Consider the status of an "average" jobber. He employs, say, five salesmen. These men will make an average of approximately 150 calls per week, or in total contact about 750 retail outlets on a weekly basis. There are thousands of these "average" jobbers in our land, along with thousands of other larger and smaller operators. Can you picture what might be the results of the contacts which this army of representatives make if their enthusiasm and efforts are properly pointed? And they are all ready and willing to go to work, gratis, for those manufacturers who may care to support them in a courageous manner.

Can you further picture the values of having this group create, and keep going, the selling interest of countless thousands of retail merchants? Of developing consumer reception and acceptance upon the part of millions? Of handling display features and proper placement of merchandise in retail stores? Effective distribution is more readily achieved by county wide coverage rather than by a few spots along Main Street.

Would Stabilize Jobbers

Manufacturers want to deal with jobbers who pay their bills. When we consider the experience of our industry during the past decade, we must marvel at the fact that candy jobbers have been able to maintain any kind of a front as long as they have. True, certain of them might have had other resources which they could have used to pour into their business, but who wants to continue to nurse a business which cannot establish its ability to function on an adequate capital investment? Better turn to another business. welfare of our business demands that those engaged in it make a profit, not an exorbitant one, but a living wage. This must be assured and the ruthless tactics of those who have too long used the candy industry as a chopping block for the sale of other lines of merchandise, must be stopped at once. The manufacturer can play a tremendous part in this movement through a declared, legal price resale and distribution policy. Let candy jobbers operate with some profit and obligations will be met promptly. Profits made by discounting invoices are too valuable to be passed by lightly.

The growing effect of codes and trade associations is also going to have a tremendous influence upon our channels of distribution and upon the products to be handled. This influence is already making itself felt and the trends along these lines will become stronger. The smart manufacturer will recognize this, will cater to more ethically minded distributors and will adopt a price resale and control policy which will guarantee satisfactory returns to himself as well as to his distributors.

Every manufacturer is seeking prestige in his chosen line of endeavor. He must create respect for his products, for his organization and for his methods of doing business. He cannot afford to cater to the whims of all but must hew to an established line. There is only one way to build this prestige and respect. He must declare himself as outlined before and then stay with the ship through storm and strife.

Jobbers Hail Cooperative Merchandising Policies

Jobbers everywhere are bailing the recently announced proposals of the National Confectioners' Association to build cooperative merchandising policies with distributors. This move is coming at an opportune time and will find jobbers willing to cooperate and organize to the point that this cooperation will mean something. We are going to achieve our objectives ultimately, not by force of threats, legal compulsion, fines and imprisonment, but rather by intelligent cooperation and educational policies which will enlarge our market, compete with other merchandise for the consumers' buying power, and will generally increase the volume of candy consumed—at a profit to all engaged in it.

The element of time should be carefully considered in any proposed move of this kind. Such policies will not become effective over night. The immediate effect may even be a temporary loss of volume. But public demand can be created and will persist with established products so that eventually those who have the courage to persist, and the merchandise to back this up, will win out unquestionably.

Certainly the field of distributors is large enough that manufacturers can afford to be selective. There is no dearth of candy jobbers. Choose wisely and well and a healthy, growing profitable business is bound to be the result.

Let us lay our plans as carefully as possible, checking results as we go, be satisfied that we are putting our best into every move and the candy business will not only witness a "new deal" but a new era of progress which will go away beyond any hopes we have entertained in the past.

This is up to you and I, and not the United States Government.

Edward Palmer Succeeds Carlton H. Woodward as Chairman of Zone 8

EDWARD PALMER, of the Palmer Candy Co., Sioux City, Ia., was elected Chairman of Zone 8 to succeed Carlton H. Woodward, of John G. Woodward Co., Council Bluffs, when Mr. Woodward resigned on July 10 at a zone meeting in Des Moines.

Mr. Woodward will thus be enabled to devote his time more fully to the Code Authority, representing Class "A" manufacturers.

At the same meeting other officers elected were: Vice Chairman—C. W. Griggs, Griggs-Cooper Co., St. Paul, Minn.

Secretary—E. G. Hames, Paris Factory, National Candy Co., Minneapolis, Minn.

Treasurer—Charles McKenna, Johnson Biscuit Co., Sioux City, Ia.

The following Committees for the Zone organization were formed:

Policy and Advisory Board—Geo. E. Williamson, John G. Woodward Co., Council Bluffs, Ia.; David Aberle, Henry C. Garrott, Inc., St. Paul, Minn.; Russ Andelfinger, Licorice Products Co., Dubuque, Ia.; W. C. Drury, Schall's, Inc., Clinton, Ia.

Labor Committee—Russell Copeland, Chairman, Clinton-Copeland Co., Burlington, Ia.; M. E. Anderson, Gillen & Boney, Lincoln, Nebr; F. Marticco, Hollywood Candy Co., Minneapolis, Minn.; H. Shipley, Fenn Brothers, Sioux Falls, S. D.; C. M. Wood, Gordon Candy Co., Omaha, Nebr.

Costs Committee—Charles McKenna, Chairman; Winslow Dunn, Vanderbie Ice Cream Co., St. Paul, Minn.; John Powell, Powell Candy Co., Minneapolis, Minn.; W. C. Drury.

Trade Practice Committee—C. W. Griggs, Chairman; John Douglas, Douglas Candy Co., Omaha, Nebr.; H. E. Raff, Gardner & Gould, Burlington, Ia. Legislative Committee—John Gurley, Chairman, Gurley Candy Co., Minneapolis, Minn.; Martin Andel-

Gurley Candy Co., Minneapolis, Minn.; Martin Andelfinger; N. B. Barsness, Barsness Candy Co., Duluth, Minn.; H. Jacobson, N. W. Candy Co., Des Moines, Ia.

Finance Committee—Charles McKenna, Chairman; E. G. Hames; J. Stolz, Walter T. Hall Co., Ottumwa, Ia.; R. Bauer, Bauer Candy Co., Lincoln, Nebr.; A. C. Dreibus, Dreibus Candy Co., Omaha, Nebr.

Trade Practice Committee, Twin City Zone—L. J. Maschka, Chairman, Hollywood Candy Co., Minneapolis, Minn.; C. W. Griggs; N. B. Barsness.

Application of

"SELLING BELOW COST" Rules in the Code

By GEORGE F. BREWER ERNST & ERNST, Chicago

An Address at N. C. A. Convention

HE code for your industry contains several provisions designed to limit what is commonly known as destructive price cutting. Out of approximately 450 codes that have been approved to date, more than 300 contain provisions similar to those proposed in the code for the Confectionery Industry.

Selling below cost consistently or maliciously for the purpose of driving competitors out of business has long been recognized as an unfair trade practice. The fact that so large a percentage of the codes, proposed by industries and approved by the National Recovery Administration, set up machinery to prevent sales below cost or to restrict such sales is proof enough that this evil is recognized as being a serious one in most industries.

That the Confectionery Industry is in a badly demoralized condition with respect to costs and selling prices hardly needs to be substantiated by proof. Some time ago we obtained a cross-section of the industry by studying a considerable number of representative companies. On reports of 60 confectionery manufacturers, who had a volume of business in excess of 35 million dollars in the year 1932, a total loss of \$1,650,000 was shown. Only 15 of the 60 companies operated at a profit, and many of the losses ranged as high as 25 per cent of sales.

We have reason to believe that a broader cross-section of the industry would tell the same story. There was, of course, some improvement in 1933, but conditions are still acute and many companies are today running at little or no profit. These losses referred to are over-all losses. Analyzing the situation down to individual lines of candy, it is noted that the price structure of certain lines is far more acute than in others and while the business as a whole may show profit, there will be a number of items being sold currently at losses.

Your industry finds itself caught between the suppliers of basic materials, such as sugar, syrup, chocolate and other similar items, and the retail trade. Your suppliers, as a whole, are working toward and for higher prices for their products and your customers, as a whole, are exerting tremendous pressure to keep sales prices down. You find yourselves, therefore, in the position of a middle industry.



MR. BREWER, who is a partner in the firm of Ernst & Ernst, Accountants and Auditors, Chicago, is an authority on NRA matters in connection with cost accounting and selling below cost provisions. His organization is working with more than 30 industries.

Destructive Price Cutting

There exists in the Confectionery Industry at least double the productive capacity required for today's available business, and the ease with which the industry may be entered holds over the market a threat of added competition at any time. Under such circumstances it is not surprising to find the industry quite generally engaged in slashing prices in order to increase volume. To a limited degree, reduction of sales prices in order to attract additional sales volume may be profitable to the individual company. With from 15 per cent to 30 per cent of the total costs in the Confectionery Manufacturing Industry being of an overhead or semifixed nature, increases in volume result in a lower unit overhead cost and a lower possible sales price at a profit. The limit to which it is profitable to reduce sales prices in order to produce added volume is, however, quickly reached by any individual company.

Unfortunately, the action of one individual company in reducing selling prices below cost so as to gain the benefit of lower costs through added volume affects not only the particular company but all competitive members in the industry. It forces competitors to go through the same procedure in order to retain their normal share of the available business and as a result, while some few companies may gain a temporary advantage, there is a permanent and unsatisfactory lowering of the selling price level. This is a common experience in many industries but is particularly true in the Confectionery Industry because of its highly competitive nature.

Assuming, then, that destructive price cutting practices exist in the industry and that we are all agreed that these practices should be restricted, the question remains: Can it be done and what steps must be taken to strengthen the price structure of the industry?

Code Bars Selling Below Cost

It is my belief that through the medium of the code of fair competition for your industry, effective steps can be taken to greatly restrict destructive price cutting. Selling below cost has become the generally accepted test of what constitutes destructive price cutting. In some instances selling below cost is justifiable, both from the standpoint of the individual company and from the standpoint of the industry. It is obvious, however, that any company that constantly operates at a loss must sooner or later go out of business and during the past few years the Confectionery Industry generally has been living on its capital.

One very important cause of destructive price cutting is the lack of knowledge of individual companies of their own costs. It is one thing to fix sales prices on the basis of the competitive level without advance knowledge as to the effect of such prices upon the operating showing of the business, and it is a far different thing to establish sales prices having in front of you at the same time knowledge of the cost of manufacture and distribution of these products. Knowledge of costs alone will not prevent selling below cost but it will exert a tremendous educational influence upon individual companies to set intelligent sales prices based upon intelligent determined costs. A great many manufacturers during the depression years seem to have forgotten that there are other ways of gaining customers and making sales aside from reducing selling prices below those of a competitor. Knowledge of product costs should have a strong influence upon the industry in again directing attention to constructive merchandising.

Manufacturers Must Adopt Uniform Principles to Compare Costs

The code proposed for your industry provides for the study of improved accounting and cost finding methods for the industry and for the determination of what is known as uniform or standard cost accounting principles. If costs are to be compared; they must be computed on a sound basis and all manufacturers must follow the same cost accounting principles. Without this uniformity, you will not be speaking the same language.

The principal problem which we encounter in establishing uniform cost accounting principles for any industry is the problem of overhead expenses. By overhead expenses we mean all costs other than those of raw materials and direct factory labor. These overhead expenses are both the variable and the fixed expenses of operating a factory; the administrative and other office expenses, and all selling, advertising and distribution expense.

In your industry, overhead constitutes approximately 40 per cent of sales but this of course varies widely with the type of product and the set-up of the individual companies. Cost accounting principles for your industry, when and if designed, will therefore largely concern themselves with providing rules for allocation of overhead to units of product.

Overhead Cost to Be Allocated

For a company operating at normal capacity on any one line or type of product, the determination of overhead costs per pound or package is a very simple matter. This situation is rarely encountered in practice.

Among the problems which would be considered in arriving at a fair set of principles for the distribution of overhead costs are the determination of what is a normal or fair amount of factory overhead and to what extent costs should absorb what is commonly known as idle plant expense, excess salaries and similar items. It will be necessary to consider the extent to which costs should include high overhead resulting from abnormally low volume either seasonally or because of excess plant capacity and the extent to which cost should include abnormally high advertising and market or sales development expense.

These cost principles when determined would no doubt attempt to establish a fair and equitable basis for determining the amount of overhead to be applied to units of product. After this has been done the principles will give consideraion to the allocation of costs as between lines and items of product so that ultimately the unit product cost will be obtained by all members of the industry.

These principles can and have been made by industries more complicated than that of candy manufacturing. The objective is not detailed bookkeeping procedure, nor is it even adequate outline of cost accounting for the purpose of internal control of expenses. In all of the larger companies and in many of the smaller companies, the industry's accounting principles would have to be amplified and enlarged to give adequate managerial information. You would have, however, a set of rules and principles, as ample as the circumstances could make them; outlining factors to be considered in calculating product costs and establishing uniform principles of cost calculation to be applied by all manufacturers in testing their sales prices. By application of such rules and principles you will be able to arrive at reasonably accurate costs, determined on a fair basis and comparable with costs, similarly determined, of your competitors.

Uniform industry cost accounting is not a new thing. A large number of industries operating through trade associations have had uniform cost methods for years—our firm alone having designed in excess of fifty of these uniform cost systems for various industries prior to the conception of NRA.

All that your code proposes to do is to recognize principles tried and proved sound over a long period of years. The code goes one step further than trade associations have in the past been able to do and makes the use of such uniform principles compulsory among the members of the industry.

Machinery Set-Up

In order to set up this machinery therefore, the following steps may be outlined:

- Approval of these provisions in your code so that they become law insofar as your industry is concerned.
- Study of the industry to determine what are the proper and fair cost principles to be applied.
- Securing of approval on such cost principles by the National Recovery Administration.
- 4. Computation by individual members of the indus-

CODE MEETING AUG. 16-17

Joint Session of Manufacturers' and Wholesalers' Code Authorities to Be Held in Chicago

THE next meeting of the Code Authority of the Candy Manufacturing Industry will be held August 16, in Chicago at the Lake Shore Athletic Club. This will be the second official session, although the third get-together of the group since its election in June.

On the following day, August 17, a joint meeting of both the Manufacturers' and Wholesalers' Code Authorities will be held. The occasion will be the first time the two Code Authorities have met together. Their objective will be discussion of means of coordinating the two branches of the industry and establishing closer unity for solution of problems under their respective codes.

It is probable that Irwin S. Moise, NRA Deputy Administrator recently assigned to Division 6, in charge of Confectionery, Tobacco, and Grocery Codes, will attend the Chicago meetings.

try of their own costs through application of these uniform principles.

Thereafter, according to the proposed Rule 4 of Article VIII, no member of the industry may sell his products at below his own costs thus computed. An exception is made to this rule to allow any manufacturer to meet the lower prices of a competitor if the competitor is not selling below cost. The code provides, however, that such sales must be reported, and grants to the Code Authority power to investigate both the cost of the manufacturer reporting sales below cost and the alleged cost of the competitor presumed not to be in violation of the code.

I would not care to delude you into believing that once this machinery is in motion, everybody is going to operate at a profit; neither would I care to have you believe that the rule prohibiting sales below cost will be automatically lived up to by all members of the industry. It is my firm conviction, however, that given the support of the industry's leaders and the aggressive backing of the Code Authority, this rule and this machinery should go far to limit sales below cost and raise the general level of business.

Key Companies Can Make Success

Investigations will be necessary but these are not impractical to make. I am informed there are approximately 1,500 establishments engaged in the manufacture of candy and subject to this code. Five hundred out of these fifteen hundred do 80 per cent of the total annual volume of business and more than 50 per cent of the total annual business is done by sixty companies. Between 65 per cent and 75 per cent of the total confectionery business is interstate business.

If these key companies in the industry will get behind a program to stamp out selling below costs, a vast amount of good can be accomplished. The prohibition of sales below cost and the practical enforcement of this prohibition will not catch minor infractions of the rule. There is a point beyond which uniform cost principles can never go and there is a considerable element of judgment that enters into the application of any cost principles. There will be many borderline cases where it will be difficult to determine whether the sale has been below cost or above cost.

Granted that the application of the rules in these borderline cases is difficult, it is equally as easy to determine any major violations of the rule. Companies showing a net loss of from 5 per cent to 10 per cent on sales are obviously selling below cost under any sensible cost determination. These major violations of the principles of selling below cost can be promptly and definitely determined and it is these cases, after all, that are the greatest cause of upset selling prices.

Lowest Reasonable Cost to Be Decided

Your proposed code has one further rule which is very constructive and which should go a long way in meeting emergencies where there is a generally demoralized price situation. This is Rule 5, prohibiting destructive price cutting and providing for the determination of the lowest reasonable cost of a product or products of the industry when destructive price cutting is shown to exist. This lowest reasonable cost will not be the average cost of a given product for all manufacturers or for a given district. Neither will it be the lowest cost of any peculiarly situated manufacturer who may have an advantageous condition not generally prevailing. It will be somewhere near a normal cost for a reasonably efficient producer.

We have had sufficient experience with provisions of this sort to feel fairly confident that it is both possible and practical to establish in an industry what is the lowest reasonable cost of one or more products of that industry. Such cost, when determined, approved and announced, thereafter becomes binding on all manufacturers of that product. The determination of such lowest reasonable cost will be based on cost studies and reports from all manufacturers of the product in question, all of which studies and reports will be calculated on the same basis, using the standard principles previously provided for in our code.

Rules Are No Panacea

Rules against selling below cost and the machinery proposed in your code or in use by other industries certainly will not let everyone in your industry operate at a profit. These rules are no panacea for all of your business troubles. There always will remain inefficient producers and mistaken merchandising plans.

The National Industrial Recovery Act, however, has not repealed the law of supply and demand. Today in your industry there exists no bottom level of selling prices. The only bottom level is that of bankruptcy and how far any individual company can financially go operating at a loss. With no absolute bottom for the sales prices today, there still remain a considerable number of companies who are operating at a profit. There still remain a considerable number of companies whose individual initiative, quality of products and sound merchandising methods are able to make a reasonably favorable showing. What this code will at-

(Turn to page 51)

Rolled Cream Centers

An authority discusses the processes in making rolled creams and presents 12 formulas for pieces of desired texture and "practically non-fermentable."

By JAMES A. KING
The Nulomoline Co., New York City
Production Forum Address at N. C. A. Convention

BOUT 350 years have elapsed since hand rolled creams were first made, and although we have little information as to the exact methods or processes used in making them, it is reasonable to assume that but two processes were used. The original method probably was to mix powdered sugar with some moisture bearing material, thus making a paste or fondant without the application of heat.

The other process was to boil sugar with water to a thick syrup, then cool the syrup and later agitate or beat it until crystals of sugar had developed, with the result that a short, tender fondant was produced.

In a physical sense, both of these processes gave the same results, for the fondant or paste was essentially a combination of sugar crystals imbedded in syrup.

The hot process produced a fondant of much finer crystals than the original or cold process, and for this very good reason the preference for the boiled process for making fondant, and from it hand rolled cream centers, is now universally used.

Some day sugar refiners may present us with exceedingly fine sugar crystals that will be about five times finer than those in XXXX or icing sugar.

We will then have crystals as fine as those found in skillfully prepared fondant. If and when this occurs fondant and cream center making will be reduced to a simple mixing process.

The candy maker, when making fondant for hand rolled creams, is plying his skill to the task of transforming comparatively coarse sugar crystals into microscopic sugar crystals.

That there is a difference in the character of rolled cream centers and cast cream centers is testified to by the remarkable increase in the production of rolled cream centers during the last ten years.

The outstanding characteristic of rolled cream centers versus cast cream centers is tenderness. This tenderness is directly traceable to the larger proportion of granulated sugar used in rolled creams, and indirectly to the amount and character of the doctoring agent. The greater the amount of sugar used, the shorter and more tender will the fondant center be.

Functions of the Ingredients

There are at least eight ingredients that may be deemed necessary to make high grade rolled cream centers: the water, granulated sugar, the standardized in-



JAMES A. KING

A practical candy maker of many years' experience in various departments, Mr. King has sold and demonstrated in candy plants in every state of the United States; as well as in Canada, England, Scotland, Wales, Holland, Belgium, France, Switzerland, Italy, Germany, Norway, Sweden and Denmark, to which countries repeated visits have been made. Mr. King is Vice-President and Sales Manager of The Nulomoline Co., which company he has served for 16 years. He is also Technical Director of the Applied Sugar Laboratories, Inc., of New York.

vert sugar, refined invertase, the flavor and the frappe. The frappe is made from corn syrup, standardized invert sugar and albumen.

Each material has a specific function. For instance, the water is used to dissolve the granulated sugar, for all of the sugar should be in solution before the syrup is boiled to the proper temperature. The granulated sugar is transformed into tiny sugar crystals, thereby giving body and smoothness.

Standardized Invert Sugar Controls Crystals

The standardized invert sugar is what we candy makers commonly term a "doctor" or the "crystal controller." It is used to check too rapid crystallization of the granulated sugar and helps to produce the largest number of exceedingly fine sugar crystals. It also improves texture and keeping properties of centers.

Standardized invert sugar, as the chemists might describe it, is sucrose (granulated sugar) which has been completely inverted, and as a result changed into levulose and dextrose. Levulose and dextrose are present in equal amounts, and in appearance it is opaque and of plastic consistency. However, when plastic invert sugar is in contact with increasing temperatures —above 75 degrees F., it gradually softens and may ultimately become clear and fluid. Even though standardized invert sugar may change in consistency and appearance, it will give the expected results, as the pH or acidity is not affected by such changes.

Since the introduction of standardized invert sugar to our industry over 25 years ago, it has been possible more accurately to control the texture, consistency and

keeping properties of cream centers.

Candy makers of the old school knew that it was necessary to carefully doctor the batch—they may have had hazy ideas as to the reactions of the cream of tartar, acetic acid and other doctors which were used before commercial invert sugar was available. But, they also knew that there were some mystifying factors that prevented them from producing centers that were uniformly tender, smooth, and free from fermentation. However, through no fault of their own they could not obtain uniform results.

The cream of tartar and other "grain killers" were frequently responsible for the untimely slaughter of too much of the sugar. In other words, the acid overkilled, over-doctored or inverted too much of the sugar and the centers instead of being short, were tough and hard to handle. Then again, the following batch might be quite the reverse. It might be smooth and tender as hopefully intended, or rather coarse and "gritty," with the probability that fermentation would ultimately blast their usefulness.

The presence of invert sugar in rolled cream centers is very definitely desired, and the requisite amount for any type of cream center can be obtained without resorting to uncontrollable doctoring agents, such as cream of tartar, etc.

The most certain way to secure the proper balance of invert sugar is to weigh it off in advance. Part of the invert sugar is added when boiling the granulated sugar and more of it is worked into the fondant in the form of frappe.

Frappe Lightens Fondant Base

The purpose of the frappe is to make the centers lighter in weight and to alter the consistency of the fondant base to which it is added. Since the frappe is an aerated syrup, more or less shortened by the addition of albumen, it invariably makes the syrup portion of the fondant more dense.

The No. 1 frappe, as given on the formula sheet, may be classed as a heavy frappe, as it contains 1 pound of albumen to 50 pounds of corn syrup and 50 pounds of standardized invert sugar.

The No. 2½ frappe would be lighter than the No. 1 grade due to the inclusion of 2½ pounds of albumen to the 100 pounds of combined corn syrup and standardized invert sugar.

· Of course, a No. 3 or No. 4 frappe would be still lighter and would have greater volume producing properties than No. 1 or No. 2½.

However, the volume of the fondant can be increased by using larger percentages of the heavier frappe or smaller amounts of the lighter grade.

Refined Invertase Controls Fermentation

We have thus far discussed most of the materials used in rolled creams, and with your permission I shall waive the subject of flavor and go on to that magic performing liquid now generally known as highly concentrated refined invertase.

Invertase is an enzyme which is widely distributed

in nature and is the means by which sugar is converted by plants, animals and insects into invert sugar. For the past ten years it has been used by candy makers in various parts of the world for the purpose of changing the consistency and softening fondant centers after the candies have been coated with chocolate.

Invertase accomplishes its effect in cream centers by converting sugar into invert sugar and to such a remarkable extent that fermentation is stopped. Fermentation is the source of the determination and spoilage of cream centers, and even today it causes a considerable annual loss to the industry. This fermentation results from the action of certain types of yeasts. Gas is produced and this in turn causes the bursting of the chocolate coating and spoilage.

Fermentation in fondant centers has been investigated by chemists, notably Dr. Schneller and Dr. Paine, and it has been found that while the yeasts responsible for the fermentation are capable of growing in syrups of high density, they are practically inactive in syrups containing about 79 per cent or more of solids.

The results suggest at once a means of controlling and preventing fermentation. In other words, if the syrup in rolled creams can be maintained at such a density that it contains about 79 per cent or more of solids and about 21 per cent or less of water, it will be free from fermentation and the problem will be solved.

Now, please glance at the last two right hand columns on the accompanying formula sheet. You will note that the syrup density of some of the batches was as low as 74.8 and that through the action of the added invertase the syrup density gradually increased to 79 per cent of solids or more, which is what may be termed the point of safety.

The use of invertase and the controlled use of standardized invert sugar in properly regulated amounts mark a very important step forward in the technic of the manufacture of all types of fondant creams. By these means it is possible to control the consistency of the centers and in addition, to change the consistency at will after the center is made and chocolate coated.

Now, let us review the process most successfully used in making rolled cream centers.

Preparation of Fondant Base

Granulated sugar, water, and standardized invert sugar are heated together to the boiling point. Then the crystals of sugar adhering to the inside of the pan or kettle are carefully washed or steamed into the boiling batch. The conscientious operator will use a thermometer and boil the batch rapidly to 240-250 degrees F. (sea level), according to the type of creams desired.

Meanwhile, a perfectly clean cooling slab or beater is ready to receive the properly boiled syrup.

About 1 pound of standardized invert sugar is daubed on the surface of the cooling equipment and the batch, as soon as it has been cooked to the desired degree, is promptly poured onto the cooler or beater.

At this point and without delay, a small amount of clean water (and it need not be distilled water) is sprinkled or sprayed over the surface of the batch.

The batch is permitted to remain undisturbed until it has cooled to approximately room temperature or to temperatures rarely exceeding 110 degrees F. The

ROLLED CREAM CENTERS

AS CIVEN AT THE "FORUM SESSIONS" OF THE NATIONAL CONFECTIONERS ASSOCIATION CONVENTION AND EXHIBITION 1934 By JAS. A. KING . THE NULOMOLINE COMPANY . 111 Wall Street, New York, N. Y.

FLAVORS	CONSISTENCY AND TEXTURE	Refer		Valer	Cream- 20% Butter fat	Boll to Degrees F. (sea level)	Design of Party of Pa		Operation of Salas	Add Plana and Color White Beating	Add Salted Buttor While Beating	Add Plants Cornel Pract White Besting	Crais Crais Prope	Crain" Crain" Develops Add: Frappo	When "Grain" Develope Add: Frappe-	When "Crain" Develops Add: Molesses	When Coase, Add: Freshmen	When Consist Develops Add: Person or Other Nat	Syrup Denoity of Cream Conters After 24 Hours	Syrap Density of Cream Contern After 10 Days
		lbe.	À	lbs.	ile.	4	·F.	-000	lle.		ā	Ile	4	-	1	1	1	Mesto		
Vanilla	Moderately Soft—Heavy— Smooth	8	01	26	1	245	80	2	1	1	1	-	01 .	1	1	1		1	76.2	79.0
Ocasge ,	Moderately Light-Plastic to Soft	69	15	11	1	349	100	~	1	1	1	1	18	1	1	1	1	1	6.77	79.4
Lemon	Plastic—Smooth	86	10.	24		244	06	2	1	1	-	1		15	1	1	1	1	76.4	80.1
Cream-20% Busser Fat	Heavy-Plastic-Smooth	06	10	1	25	.242	06	24	1	t	Manage	Miles	1	10	1	1	1	1	75.9	78.7
Chocolete end Buster	Plattic-Emouth	80	- 20	20	-	248	110	~	7	1	5	1	1	10	1	1	1	1	78.9	80.8
Plante Milk	Soft-Elestic-Smooth	86	10	24	1	248	110	24	1	1	-	20	1	10	1	1	1	1	0.77	79.6
Roman Punch and Cocoout	Very Soft—Smooth	8	10	24	1	250	011	2	1	1	1	1	10	1	1	1	15	1	74.8	78.9
Molesses and Butter	Short—Light—Smooth	8	10	24	1	248	110	2	1	1	1	-	1	1	-	20	1	1	76.1	79.4
Coffee	Light-Plastic-Smooth	88	15	12	-	346	100	2		1	1	1	1	1	23	1	I	1	27.3	0.67
Noyeaux and Nucs	Slightly Tough-Moderately Light	08	30	20	-	248	110	2	1	-		1	1	1	13	1	1	7	78.8	80.5
Coroour and Vanilla	Coccesse and Vazilla ShortLight-Smooth	08	20	20	-	230	110	22	1	-	1	1	-	1	20		10	and a	79.1	80.7
Butter and Vanilla	Plastic—Smooth	88	15	22	-	246	100	20	-	taveau	10		420.00	2	-	-	1	1	75.7	78.8.
20 personals 20 n n n n n n n n n n n n n n n n n n n	FRAFFL—No. 1 50 pounds Care Yarde Learn Super 1 . Abstraction factor for the form of the	t of the and attraction abbunces	100 per 150 a SYS 3 A SYS 100 a SYS	FRA Based order Based order Albeanon Water France order France ord	FRAPE.—No. 215 To peach Can Syndy Lear State 12.5. Abstraction of the Syndy Lear State 12.5. Abstraction of the Syndy Lear State 12.5. Approximately to 212 degrees P. Blets of the Syndy Learn Syndy Learn Syndy Learn Syndy Learn Syndy Learn Syndy Learn Learn Syndy Learn Le	Shut of the Sugar and attributed ablument		20 peemde Core 20 . Sead 4 . Alban 7 . Cold Boil the core n until metted. Prints. ing. then ded it.	FRAPPE—No. 6 Core 5729 Steadcafted lever fages Steadcafted lever fages Cold water Cold water To Stead faces To Structure to 335 degrees To Structure to 335 degrees To Structure faces T	FRAPE—No. 4 29 peaced Core Syrap better lines 1	and the control of th	60 peeceds 60 c 4 n 7 u Real the cor	3 2 2 2 2 2 2 2 2	MOLASES FRAPFE. A grade unsupplement necleus sees. Franchisched in Frapfe 25. degree F., sid its Frapfe 25. degree F., sid its Frapfe 10. 25. degree F., sid its Frapfe 10. 25. degree F., sid its Frapfe 10. 25. degree F., sid its Frapfe 25. degr	the molarier lecter, itari afferner and	2 - 349	FRES 12 peemds Corons 4 a Sandad IR the Sandard Ired the reco	FRESHENED COCONUT 12 pounds Corean (desirons) 4 "Subservational bears Super 5 "The Research of the Corean Mit the Research of the Superior o	ONUT	V 249

cool syrup is now ready to be creamed or beaten to produce very fine sugar crystals.

While the batch is being agitated or beaten into fondant, the refined invertase is added and later the flavoring materials and coloring.

Thus far, about two-fifths of the operations necessary to make rolled cream centers have been completed, namely, the preparation of the fondant base.

Rolled cream centers are a combination of the fondant base, plus that character-giving substance known generally to candy makers as frappe.

Frappe Made in Advance

The making of the frappe in advance is a routine performance. It is easy to make and can be carried in stock for long periods without danger of fermentation

The frappe, as a rule, is added to the fondant base before sugar crystals have been fully developed, but care should be used to insure the even distribution of the frappe throughout the fondant base before the batch sets into a firm mass.

Now, let us briefly rehearse a few of the operations performed.

Frappe of the required type was prepared in advance. A fondant base was made from a boiled syrup consisting of granulated sugar, water and standardized invert sugar. This syrup was cooled and while beating it the refined invertase was added, and later the flavoring materials.

As the batch became opaque in appearance, the frappe was added, and finally the assembled and processed materials gradually changed from a heavy viscous syrup to a firm paste or putty-like mass. This cream center mass is warm. Frictional heat was developed during the creaming process and the batch, when it cools to room temperature, is ready to be formed into shapes and later coated with chocolate.

When we consider how relatively simple is the process of making rolled cream centers, the extent to which they may vary in different characteristics is quite remarkable. Therefore, a thorough understanding of the structure of fondant and the reason for its variations in quality and keeping properties will enable one to avoid pitfalls and costly errors.

One of the most important tests of any manufacturing process is the ability to turn out consistently a uniform product of any desired type.

"Freshness" in Centers

The accompanying charts outline twelve formulas for as many diffent types of rolled cream centers. The effort has been made to present to you formulas for centers distinctly different in consistency and texture, and to balance the formulas so that after the expiration of ten days the syrup density of them all will be high enough to rate them as practically non-fermentable and, therefore, "habitually" fresh.

Freshness, however, is by no means a matter of age. A number of factors are involved in freshness, among which are the percentage of water contained in the centers and freedom from fermentation. Rolled cream centers constructed along safe lines may be fresher from all practical standpoints, after many months, than improperly made centers after two weeks. In fact,

as long as the centers have the proper texture and consistency and are free from fermentation, they are fresh, to all intents and purposes, and are so regarded by even the most critical.

Now, there was a time when hand rolled creams were made principally by the manufacturing retailer and medium sized factories, and the centers were in reality rolled by hand. Today, however, by far the greater bulk of such cream centers is formed into definite shapes by machine. The fact that machinery could be so successfully and economically used to give a wide range of shapes and sizes to this type of cream center very greatly stimulated interest on the part of the larger manufacturers.

Twelve Suggested Formulas

In working up the twelve formulas listed on the chart before you, a different shape was used for each flavor. Some of these centers are of the size and shape of a diminutive marble, others are square, oblong, halfround, oval, and egg shaped; all of which can be of different weights and size.

Centers for bar goods weighing as much as severat ounces each can be conveniently formed, or miniature centers weighing 50 to 90 to the pound can be turned out at will and with the exercise of no unusual skill on the part of the operator.

Skill, however, must be exercised when making the fondant and frappe parts of the rolled center batch. If, through the excessive use of the doctoring acids, the fondant is over-doctored or cooked to a too low temperature, or if improperly made frappe is used, the cream will lack body and be too soft.

The machine, however, may deliver centers fairly uniform in shape and size, even though the batch be tough or rather soft, but the centers shortly after having been formed will lose their shape and cling to the receiving plaque or tray. On the other hand, the softness may be caused by the presence of frictional heat in the batch, and it is better to cool the cream to normal room temperature before it is placed into the hopper of the machine.

Cream that is firm and smooth will give clean-cut shapes, and there will be less scrap and a reduction in labor costs if a firm rather than a soft cream is fed to the machine or rolled by hand.

Make the batch so that it will be firm and easy to form. Deliberately boil the syrup part of the fondant high enough, even at the risk of having it too firm. The invertase will soften the cream centers after they are coated in chocolate, and it will do this either rapidly or slowly, depending upon the amount of invertase used.

Add a minimum of 2 fluid ounces of refined invertase to each 100 pounds of the cream center batch and larger amounts when rapid softening action is desired.

In order to understand how the desirable properties of rolled cream centers may be controlled to the end that uniform results will be obtained, it is advisable to visualize their structure rather accurately.

We know that fondant is an intimate mixture of tiny microscopic sugar crystals and syrup. In fact, a crude cold process fondant could be made by mixing together 50 pounds of standardized invert syrup and 50 pounds

(Turn to page 52)



Gelatin—Its Use in Marshmallow Work

N THE mention of edible gelatine we speak of a pure food product carefully manufactured as an article of food, and which when sold on a commercial basis is used for further manufacturing purposes.

The first important consideration in the production of edible gelatine is the raw material, which may be divided into three classes—bone, pig skin, and calf. Gelatine extracted from these materials is known as Caseine or Bone, Pig skin or Trimmings, and Calf or Calf stock, respectively.

Sources of Gelatine

Practically all the bones originate from the cutting floors of packing houses, which operate under government inspection. Same may be divided into two general classes—hard bones and soft bones. After the Convention Forum Address

By F. E. ROBINSON

United Chemical & Organic Products Co.
Chicago, Ill.

meat has been removed the bones are put into vats where they are cooked at a low temperature to assure the removal of adhering meat. Then the bones are washed and dried and shipped to the gelatine plants where they are crushed, degreased if necessary, milled to the required size and later transfered into vats, then treated with dilute hydrochloric acid to remove the phosphates. Aside from a fast whipping characteristic, bone gelatine will also film or set quickly.

Pig skins also originate from packing houses and are procured largely from fat backs, i.e., strips from

the backs of hogs which measure up to five inches wide and twenty inches long. Excess fat is removed from the skins by putting them first through a trimming machine and then through a fleshing machine. Such skins are baled to facilitate handling and frozen at the packing house. They are shipped to the gelatine plants in refrigerated cars—each strip bearing the U. S. Government inspector's stamp.

To prepare for cooking simply involves thawing the skins and treating with a little acid to cause plumping. Less than 24 hours is required to effect complete con-

ditioning of the skin.

Pig skin gelatine is outstanding in color and clarity and due to a comparatively low temperature of extraction a very high testing gelatine is obtained. This type possesses a reasonably fast film or set when used in making marshmallow.

Calf stock, comprised primarily of hide trimmings, is received at the gelatine plants, dried, limed or salted. After washing, the pieces are treated with a mixture of sodium sulphide and lime to facilitate removal of the hair. The pieces are then limed for a considerable period of time and thoroughly washed. Before cooking, the pH of the skin is reduced by treating with phosphoric or hydrochloric acid. Gelatine produced in this manner is called "Alkaline," although the degree of acidity or pH lies, as a rule between 5.5 and 6.0.

Processing of Gelatine

COOKING—When the raw material is properly prepared, there is very little difference in the method of further processing after it reaches the cooking receptacles, whether the material be bone or hide.

After the raw material is loaded into the cookers it is covered with hot distilled water and allowed to stand at a constant temperature for a specified time, depending upon the density or strength of the liquor desired. From time to time liquor is drawn off and additional water added. This operation is repeated until all collagen is converted into gelatine.

The residue which remains is dried and used for cattle feed as it possesses a high protein content.

Spreading Belt and Tunnel Drying—Gelatine liquor is fed on to one end of a rubber belt, about 100 feet long with molded edges rising three-quarters of an inch above the belt, which travels through a refrigerated tunnel. By the time the liquor has passed through the tunnel it has reached the consistency of a stiff jelly. This jelly is then dropped from the rubber belt in a continuous sheet—cut mechanically into proper length, and spread on aluminum nets fastened to frames. Frames containing the jelly are loaded on trucks and transferred into drying tunnels through which a current of air is constantly passing at a fairly high velocity. This air is tempered to meet the requirements of drying conditions. This drying process requires from 8 to 12 hours.

Dried gelatine sheets are fed to a crusher and broken into small pieces or flakes and later milled in order to produce the granulated form.

Wheel dried gelatine is the equivalent of feeding gelatine liquor on the face of a large steam jacketed wheel about 20 feet in diameter and 3 feet wide; and in the course of about 50 seconds peeling off films of dried gelatine. This dried gelatine in ribbon form drops automatically into cutters and is loaded directly into barrels.

A great deal of the art of gelatine manufacture goes into the control of the mixing and blending operation: since there is a known relationship between the physical characteristics and the working qualities of gelatine in practical use. As a rule, low test gradings are used principally in grain marshmallow, the medium and high test grades for cut and white cast marshmallow.

Use in Marshmallow Work

Gelatine is one of the most important ingredients contained in marshmallow. Marshmallow consists essentially of air dispersed in a solution of sugars by the aid of an emulsifying agent. The nature of the resulting product varies with several factors which will be discussed later.

A typical white cast marshmallow formula is:

60 lbs. sugar

40 lbs. corn syrup

3 lbs. invert

2 lbs., 5 oz. high test gelatine

36 to 38 lbs. water (over all).

A marshmallow syrup made accordingly would contain about 32 per cent water. Under ideal plant manufacturing conditions the finished marshmallow when packed should contain from 17 to 18 per cent moisture.

The ideal marshmallow must possess the following characteristics:

1. Good flavor

2. Tender but firm texture

3. White color

4. Maximum moisture content at time of packing

5. Uniformity in weight and appearance

Keeping ability—non-graining (non-drying) within shelf-life period.

7. No excess starch or sugar

8. Good character of skin-no crust

9. Short-springy-not too chewy

Technical control plays a most important part in the manufacture of good marshmallow. An efficient beater should be used and the marshmallow deposited in properly conditioned starch containing a minimum moisture content. I suggest you find out definitely just how effectively starch can be conditioned in your plant and maintain this as closely as possible. As a rule the temperature of the starch should be approximately 10 degrees under the temperatures of the marshmallow as deposited. For example, the temperature of the marshmallow 95 to 105 degrees, F., would mean that starch should run 85 to 95 degrees.

Proper curing is a most important step in the manufacture of marshmallow. With the proper character of coat or skin, the finished marshmallow will not sweat or stick. Bear in mind the humidity of the air will have a marked influence upon the skin formed on the tops. With too much moisture in the air the skin will be poor and thin and the marshmallow will be apt to stick when packed. When the air is too dry, the tops have a tendency to wrinkle.

Plant EFFICIENCY

By DALE G. STEELEY General Superintendent

Production Forum Address at N. C. A. Convention

VER since the work of Taylor and Gantt set industry to thinking about efficiency, there has been so much said and written about it by technical and practical men that very little if anything new or interesting can be brought to light. If we could take up, one-by-one, the troubles that b'devil each of us, we might find, in our common knowledge, solutions for many of them. But, of course, in this discussion such a thing would be impossible. We must confine ourselves, for the most part, to generalities. I shall, therefore, make some general comments on the following subjects:

First—Flexibility; second—Blindness; third—Remedy; fourth—A House in Order.

Flexibility Aids in Production

Regarding the manufacture of candy, there are two generalities that just about cover everything. First, a plant layout that will permit following the line of least resistance. This line may be on one floor only, or gravity may be employed extending operations over several floors.

The other generality is manufacturing flexibility. Now, no one will deny that efficiency as it is generally understood is incompatible with factory flexibility. But may we not view efficiency in a wider sense and look at the factory as a whole and as a means of meeting the changing demands of season as well as the whims of a more or less fickle public and arrange for reasonable flexibility?

The problem, of course, is how to do this without waste of floor space and excessive cost of machinery. Sufficient time and study given to this subject would probably suggest a grouping of men, processes and equipment. This grouping would make possible a greater variety of machines than would be justified if they were to be distributed in widely separated parts of the plant,—thereby probably necessitating duplication of certain machines which would stand idle part or even most of the time.

There seems to be no good reason why a hard-candy maker, for instance, should not be trained to make other kinds of goods than those which he is usually expected to make. Such grouping of machinery might not be advisable in all factories, but it has been helpful in some plants. There seems to be a tendency, however, to segregate processes and machinery where there is no advantage in it. Apparently there are managers who do not allow their right hands to know what their left hands are doing. This is an open question which each of us must decide for himself; and it must be admitted that absurdities in factory layout are often the result of gradual changes in method or product,—which

changes have upset the balance of what was once an orderly procedure. This is a point which I wish to emphasize: "Why continue with these absurdities?" The answer: "Because we don't see them!"

Occupational "Blindness" Common

There is a human defect in all industrial activity which is a constant cause of complaint. Most likely King Solomon and Hiram kicked about it when they were building the temple. This defect might be described figuratively, as occupational blindness,-for a blindness to the details of our habitual surroundings certainly exists. We shall, of course, continue to talk about it; but as Mark Twain said of the weather, "Everybody complains about it, but nobody does anything about it. After all, perhaps this form of visual failure is a logical result of our education. Are we not taught from early childhood to adjust ourselves to circumstances? Our inability to see the obvious, oft-times when it is staring us in the face, is well known. In an attempt to do something about this common abstraction on the part of workmen (and executives as well) one naturally tries to discover the cause. Undoubtedly, the management must accept most of the responsibility for it. Preoccupation cannot account for all of it. Insufficient help, delay or failure to make repairs and alterations, poor make-shift utensils all engender a don't-care attitude on the part of workmen and foremen. "What's the use," they say; and it is only a matter of time 'til they don't see anything wrong.

In every factory, there should be a place for empty containers so that they may be removed promptly from the workrooms as soon as they are emptied. Otherwise each workman will dispose of his debris to suit his own convenience without regard to how it hinders others. Aisles should not be cluttered up with barrels, boxes, crates, and stock trays; but unless systematic provision is made to care for these things, they will just lie around and take up as much space as if they were full,—slow down operations, and make their contribution to accidents. Probably most of us have seen men, when carrying heavy batches, kick a stock tray or a box out of the way before the batch could be poured. Bad? Yes. But it is the sort of thing that one can get used to if once we accept such things as a matter of course.

In my own experience, it is the multiplicity of little

YOUR SEPTEMBER ISSUE

NEXT month the entire issue of The MAN-UFACTURING CONFECTIONER will be devoted to candy packaging. It will be our Annual Packaging Number, including discussion of new trends and developments in various types of confectionery containers.

The packaging articles featured in current monthly issues of The MANUFACTURING CONFECTIONER, to help you keep abreast of new ideas in design and materials, will be climaxed in a complete issue on all phases of this important subject!

Many authorities—each in his own field—will write for you! Results of extensive research will be placed before you.

Coming next month in The MANUFACTUR-ING CONFECTIONER—only publication specializing exclusively on the problems of candy manufacturing!

things requiring attention that is most exasperating. Leaking kettles, sliding truck-wheels, broken hinges or latches on doors, broken window panes, holes in cement floors, starch trays and center trays in disrepair (the two latter items a menace to centers) are still bothersome and generally neglected. The list is long; and whether the mechanical department consists of one man or of twenty men, it never seems to get caught up. We call attention, in writing, to these things and urge immediate repair; and after a reasonable time, again call attention to such repairs as have not been made and ask reasons for failure to get all the work done. Too much work for the repair department is the usual report. Recognizing the probable truth of this but disliking to increase the mechanical force, most of us close one eve when these painful reminders of life's futilities appear.

This willful closing of the eye is the first approach of that blindness previously referred to. Isn't it amazing how badly in need of repair a machine may be and still do its work and at the same time escape the attention of casual observation! Here is an illustration of something similar:

In an exceptionally well-arranged and equipped factory, not a thousand miles from here, (one which enjoys a fine reputation for quality) there arose occasional trouble with sandy creams. After some investigation, it was thought that the cream man permitted the melting kettle to get too hot; and it was suggested that in that case it be cooled down. The cream man and the assistant superintendent said there was no way to do this. An examination showed that the steam fitters had not discovered the cold water inlet on the under side of the kettle. The superintendent of this factory is an able man with a long and fine record back of him, but he has rather too much to do and his assistant and cream man both just took the installation for granted.

In another factory where there was no practical superintendent, an order was issued from headquarters specifying that beginning at once all caramels for dipping were to be cast in starch. There was no caramel kettle on the starch floor and no vacant space for one; so the foremen got together and, like the sea captain who obeyed orders even if he broke the owners, they followed instructions! The caramels were cooked on the top floor, lugged across two buildings, taken down the elevator, and carried another forty feet to the mogul. This costly procedure was corrected, only after many months, by removing obsolete equipment on the starch floor and replacing it with caramel kettles from the upper floor. Situations as bad as this are not common of course; but no one would have expected to find it in that factory.

Remedy Lies in Plant Observation

As this occupational blindness is the result of being constantly too close to the picture to see it, the cure would seem to be in getting away oftener. But for what are considered good reasons, managers and superintendents feel that they cannot go away often. Then perhaps the next best thing is to take periodical trips through the plant and examine it with seeing eyes.

Select several important items, one at a time, and actually trace the raw materials from which they are made all the way from the stock room through the various processes of manufacture, noting not only the path taken but the time of each operation. Also note the amount of space required for raw materials at each step, and determine if it is adequate. While doing this, try to visualize the other operations going on and see if there is any interference.

Pay particular attention to the transportation of raw materials and goods in process, noting if there are enough trays and trucks, and also see if they are in good condition. It is a common fault of workmen to hold small trucks out of use for days or even weeks at a time as it is easier to push a truck loaded with supplies into a corner and to leave it there than to unload it. It is also a most natural thing for superintendents to overlook this in a casual trip through the department. In making a survey, write the whole proceeding down and then find out what steps can be eliminated and what gaps can be filled.

A House in Order

Probably there is no real cure for all of this so-called blindness. Perhaps we must just keep treating it as chronic disease; but most of all, we should teach subordinates the importance of direct, orderly procedure; stimulating their pride in their work, and in the neatness of their machines, utensils, and immediate surroundings. All must realize that pride in their jobs is a most valuable asset on the part of workmen.

At the outset I thought it better to avoid making any definite suggestions regarding factory design or layout. The labor-saving machinery which has been developed during the last five years—a period in which the world never needed it less—causes one to be ultra-conservative when making plans for building, or extensive alterations.

However, I think it safe to suggest four, five, or six high-studded stories so that mezzanines may be used where advantageous. Get the greatest window area consistent with good construction. While this will require more refrigeration, the increased efficiency of employees, and a more constant high average of quality due to better light, should compensate for this extra cost.

Install glucose tank, also one or more sugar hoppers on the roof. Sugar will flow freely at an angle of sixty degrees, so it can be delivered to several points from each hopper.

This arrangement is more than mere economy. It keeps the barrels or bags out of the work rooms, and it may offer advantages in some places in purchasing.

Air conditioning is today a necessity and if properly installed is an economy. Recent developments make it possible to place small units in rooms requiring conditioned air. This arrangement makes it easy to regulate the temperature and humidity to suit the particular work in each department without regard to other departments. The separate unit system also does away with large and costly air ducts which are a constant problem when making alterations because these ducts are always difficult to get around.

Vacuum cooling seems to have come to stay.

The so-called boardless mogul I have not seen, although I've had good reports of it and I venture the prediction that it or some similar machine will surely come into general use. The simplification of process and great saving in floor space, also economy in air conditioning, would seem to make this prediction sound.

Efficiency is sometimes described as doing the right thing in the right way at the right time,—or in getting a maximum of production with a minimum of effort. The means for accomplishing this end, it has been said, are men, money and machinery. This, as a general statement, we may accept, but it needs elaboration to give it value. To it we must add: knowledge, skill and co-operation.

In order to gain this co-operation, there is needed one more element. It is something that money cannot buy. It must be earned and then carefully maintained. It is the thing that puts quality into our product and the one thing that keeps it there. That element is *employee goodwill*.

All that has been said of flexibility and efficiency and blindness is important only if one's house is in order. We can buy machinery and we can hire experts, but we must earn and merit the goodwill of those who work for us. Present day industry faces a demand that the house be put in order,—that the employee be treated intelligently and honestly. Goodwill within means goodwill outside. Lacking either, we cannot long survive.

Manufacturers' Code Authority in First Official Meeting Passes Many Rules

HE Code Authority for the Candy Manufacturing Industry held its second session, July 15 to 18, at the Chicago Lake Shore Athletic Club, with NRA Deputy Administrator C. W. Dun-

ning in attendance.

The major portion of the sessions was taken up with Code interpretations incident to complaints filed by members of the industry addressed to the Code Authority and a number of other important matters. Rules and regulations governing the filing of prices under the "Open Price Plan" were drawn up and approved. An

Inter-Trade Relations' Committee was formed and plans for its procedure are now being drawn up. The By-Laws were amended. A budget was compiled for NRA'S approval. A plan of procedure was partially set up for the Trade Practice Complaints' Committee. A decision made to clarify Code provision on cash discounts. A report was made by H. B. Ludlum of Dun & Bradstreet on suggested rules to govern filing of prices under the "Open Price Plan" and rules for publicity of prices. A report was heard from the Committee on Distressed Merchandise.

Rules on Open Price Plan

The term "Buyer" was defined by the Code Authority in order to obtain uniformity in the Open Price Plan. Also a list of rules governing classification of products in filing under this plan was formulated.

The Code Authority arrived at the following conclusion with respect to one phase of the Open Price Plan: that candy products manufactured by one company, under contract for another company, are required to be filed under the Open Price Plan either under the name of the company for whom the goods are manufactured or under the trade name of the goods.

Also in connection with the Open Price Plan this point was brought out: only manufacturers filing prices will be privileged to inspect the filed prices of other members of the industry.

Inter-Trade Relations' Committee Formed

To settle the question of manufacturers conforming with provisions of the jobbers' code, the Code Authority set up an Inter-Trade Relations' Committee. This committee will meet with a similar committee for the Wholesale Confectionery Industry, in order to coordinate the activities of the two industries with respect to the provisions of both codes.

By-Laws of Code Authority

Section 8 of the By-Laws, as amended by the Code Authority, stipulates that special meetings of the Code Authority may be called by the chairman at the request of the N.C.A. Secretary, the Administrator or representative, an Administration member, three industry members of the Code Authority, or twenty-five members of the industry.

It was decided that, in accordance with Article VI, Section 9 of the Code, the National Confectioners' Association shall carry out the activities provided for the Code Authority (selected in accordance with the provisions of Schedule A of the approved Code), and that the Association shall at all times be subject to and comply with the provisions of the Code.

Rule on Cash Discount

It was decided to issue to all members of the industry a clarifying statement that the rule in the Code on cash discount providing for 2 per cent in 15 days is established as a maximum and that it is optional with the manufacturer to grant anything less than 2 per cent in 15 days.

Dun and Bradstreet Report

To expedite the matter of filing prices and to provide for uniform procedure at a cost which would be approved by the Administrator for service, H. B. Ludlum, representative of Dun and Bradstreet, appeared before the Code Authority meeting July 15 and

16 and suggested a plan for the handling of the Open Price Plan.

Distressed Merchandise Rules Re-phrased

It was considered feasible by the Code Authority, after hearing the committee's report on distressed merchandise, to authorize Managing Director Taft to rephase the rules and regulations to the sale of distressed candy provided for in Rule IV, Article VIII.

"Pick and Draw" Rule to Stand

Mr. Fathchild, attorney for a group of manufacturers opposed to rule nineteen, Article VIII, being retained in the Code, appeared and asked that the Code Authority request the rule be stayed. The Code Authority considered it inadvisable to poll the industry in regard to the "Pick and Draw" ruling, inasmuch as the result of a public hearing held by the Administration July 10 was to continue a stay of the provision until July 30, after which date the prohibition of "Break

and Take" and "Pick and Draw" merchandise would become effective.

Yearly Sales to Be Reported

That members of the industry will be requested to submit to Ernst & Ernst, as an outside agency, a statement of their net sales of candy of their own manufacture for the year ending June 30, 1934, was another decision made by the Code Authority.

The Code Authority, consisting of the following, were present: George H. Williamson, Chairman; J. M. Gleason, Secretary; Max Sobel, Treasurer; W. E. Brock, J. W. Brooks, F. A. Bunte, A. C. Carrington, W. W. Reid, Jr., John Voneiff and C. H. Woodward. Also present were Pat J. Taft, Managing Director, and Max F. Burger, Asst. Managing Director, besides Major Dunning. Angus Shannon, Chicago N.R.A. legal adviser, attended the first session.

This was the second meeting of the Code Authority, but its first official session. The next meeting is expected to be held about August 15.

State of Emergency in Jobbing Trade Declared As Code Authority Asks NRA to Set Lowest Cost Figure to Curb Price Cutting

Public Hearing in Washington August 14 Asks for 20 Per Cent Margin on Selling Price to Be Enforced During Emergency

ECLARING that an emergency exists in the wholesale confectionery industry, and that the cause is destructive price cutting, such as seriously to endanger maintenance of the provisions of the Code, the jobbers' Code Authority has been granted a Public Hearing on August 14 in the Mayflower Hotel, Washington, D. C., seeking to obtain NRA approval of a 20% margin on the selling price of wholesale confectionery during the emergency period.

The Code Authority is asking that the Administration set the lowest reasonable cost of the products of the industry at a figure equal to 20% of the selling price or its equivalent of 25% on invoice cost. The Code Authority has "caused to be determined" the above figures as the lowest reasonable cost.

In a letter to Irwin S. Moise, Deputy Administrator in Division 6, making application for the hearing, Herbert Tenzer, Secretary and Counsel of the Code Authority, said, "In New York City a figure of 16.66% on invoice cost or its equivalent of 20% on selling price would constitute the lowest reasonable cost of the products of the industry in said area, including the counties of Westchester, Nassau and Suffolk in New York State."

The action of the Code Authority under emergency conditions is permitted by Rule 6 of Article VIII in the Wholesalers' Code. If the NRA approves the case, jobbers will be prohibited from selling below the established "lowest reasonable cost of products in the industry," until conditions change and the determination is reviewed.

The Code provision in Article VIII, Rule 6, which

permits the determination of a state of emergency and finding of the lowest reasonable cost is given below:

"When the Code Authority determines that an emergency exists in this industry and that the cause thereof is destructive price-cutting such as to render ineffective or seriously endanger the maintenance of the provisions of this Code, the Code Authority may cause to be determined the lowest reasonable cost of the products of this industry, such determination to be subject to such notice and hearing as the Administrator may require. The Administrator may approve, disapprove, or modify the determination.

"Thereafter, during the period of the emergency, it shall be an unfair trade practice for any member of the industry to sell or offer to sell any products of the industry for which the lowest reasonable cost has been determined at such prices or upon such terms or conditions of sale that the buyer will pay less therefor than the lowest reasonable cost of such products, except pursuant to any rules and regulations which the Code Authority shall prescribe, subject to the approval of the Administrator."

"When it appears that conditions have changed, the Code Authority, upon its own initiative or upon the request of any interested party, shall cause the determination to be reviewed."

In commenting upon the necessity of declaring a state of emergency because of destructive price cutting, Mr. Tenzer said, "This opportunity has long been awaited by all of us. Our individual efforts have not borne fruit, despite the tremendous amount of work done. The opportunity is here and we must take advantage of it."

Various Starches - Various Uses

Convention Forum Address
By GEORGE E. CORSON
Mgr. Bulk Starch Sales Dept.
Clinton Company, Clinton, Ia.

DISCUSSION of thin boiling starch in gum work, moulding and powdered starches in different goods . . . Also precautions on starch dust on machinery.

LTHOUGH starch is a widely distributed natural compound, many modifications of the material may be made. The starches of interest to the confectioners are thin boiling, moulding, and powdered.

The meaning of "fluidity" and the fact that there are starches used with fluidities varying from 40 to 75 in the production of gum work is familiar to all of you, and this has been discussed at a previous forum.

The purpose of a thin boiling starch is to hold the other ingredients of the batch in a semi-solid form with the proper amount of moisture to render the finished gum work tender and give a piece with long shelf life.

The conditions necessary for the production of satisfactory gum, from the standpoint of starch, depends upon a number of factors: The amount of starch used, its fluidity, the temperature of the cook, time held in the kettle, and the condition of the moulding starch in which the gum is cast.

Ordinarily, from 9 to 10 per cent of thin boiling starch figured on the basis of total sugar, syrup and starch, is sufficient. With 80 to 90 pounds of steam pressure on the kettle a 500-pound batch would finish in not over 35 to 40 minutes from the time the batch comes to a boil.

During the past few years the cooking time for gum work has been materially shortened. This decrease in time has been made possible with the development of thin boiling starches which clear rapidly in the kettle, yet have sufficient jellying strength to give the necessary body.

Various Fluidities Required

The question has often been asked as to what fluidity starch is best suited for different classes of gum. This will again depend upon several factors. In general, however, the thinner boiling starches varying in fluidity from 50 to 65 give best results for gums such as large drops and orange slices. For JuJuBee work the lower fluidity starches from 40 to 50 seem to give the desired consistency.

Although the manufacturer of a thin boiling starch may produce a product to give a certain effect, best results can only be obtained when that product is properly used. The qualities of the starch may be completely destroyed by improper handling. In view of this, it is suggested the directions given by the manufacturer be carefully followed.

There has been no universal starch made which will give good results in all classes of gum. The various

manufacturers have developed products for specific purposes and these starches are not offered to the confectioners without being tested in actual production over a long period of time.

Gum work has gone through many changes. A few years ago the demand was for a cloudy, tender type. Later a change was made to a gum which was very short and could be broken without a trace of string to the piece.

Today the demand seems to be for a clear, tender type with a slight string. It has been necessary for the manufacturers of starch to follow these changes and develop products to produce the character of gum most desired. With the variety of starches available and the proper handling of these, most any character of gum may be made to meet the changing demand. It is through the development of thin boiling starches that we have gums today which approach more nearly a true jelly.

Moulding Starch

In addition to thin boiling starches, candy manufacturers require a starch which will hold an impression and into which gum work, cream centers, marshmallow, and other confections may be cast in a semi-liquid form. The product is known as moulding starch. This product has the threefold purpose of transmitting the design to the piece cast, removing moisture from the goods and keeping dust down to a minimum.

Ordinarily two grades of moulding starch are offered, one light in body, and the other somewhat heavier. The lighter grade is used to make up losses of starch from the boards when the old starch becomes too heavy. The heavier grade is added to increase the body of the starch on the boards. In rare cases should all old starch be discarded and replaced with new moulding starch entirely. A mixture of 25 per cent old starch and 75 per cent new seems to give more satisfactory results, due to the presence of sugars in the old starch which tend to increase the porosity of the mixture, thus aiding in the removal of moisture from the pieces cast.

Occasionally, where starch on the boards is very heavy, that is, has too much body, powdered starch may be added in small amounts. Care should be taken, however, in using powdered starch in this connection, for a reason which will be mentioned later.

Temperature and Moisture Important

The temperature and moisture content of the moulding starch into which candies are cast is important. For marshmallow of the 400 count type which finishes in the beater at 98° to 100° F., it is thought the more closely the moulding starch is held to this same temperature, the more desirable the results, providing the moisture content of the starch is held at approximately 51/2 to 6 per cent. Where grained marshmallow is cast, the moisture content of the starch may be reduced to $3\frac{1}{2}$ and 4 per cent, and the temperature raised to as high as 140° in the dry room.

Orange slices and other tender gums may be cast in starch with 71/2 to 8 per cent moisture, at which point the rate of removal of water from the goods is believed to be greatest. If starch with a very low moisture content is used, there is a tendency for a heavy film to form over the gum, and the removal of water is retarded. Dry room temperatures from 120° to 140° are commonly used, and where the moisture content of the starch is satisfactory, a variation in drying temperature is not serious.

As was mentioned, powdered starch may be added to the boards under certain conditions, although care should be used in this respect.

Starch Dust Precautions

Undoubtedly all of you have noticed, when going through your factories, the large amount of starch dust present in the air during the operation of the Mogul and the starch handling equipment. When dry starch is in a very finely divided state and is suspended in air in just the proper proportion it will explode if ignited. The dryer the starch the greater the danger. This statement is not intended to alarm you, but the suggestion is offered that you inspect your equipment carefully to see that all machinery having to do with the handling of starch is grounded; that all motors are in good condition and not sparking. Switches should be provided which do not arc, and all light bulbs should be protected by guards. These are the common sources of sparks causing the igniting of starch dust and have resulted in many serious explosions. Manufacturers of starch are constantly on the alert to see that every precaution is taken to keep down dust and that all equipment is protected in such a way as to prevent the formation of static electricity or the possibility of ignition from other sources.

It is believed that confectioners should also use reasonable care in the handling of starches to prevent the accumlation of any quantity of dust in the air.

Some years ago a large candy factory in New York City, also one in Grand Rapids, Michigan, were destroyed, due to starch explosions.

· Fortunately, the air in the average gum department in a candy factory carries a high percentage of moisture which tends to reduce the chances for explosions. There are, however, some candy factories cleaning starch in very small rooms, with the idea of keeping down dust in other places in the department. The air in these rooms is usually filled with dust, and if the starch is ignited the explosion would tend to disturb starch dust in other parts of the factory, with the result that a secondary explosion might occur.

In view of what has been said, the suggestion is again made that you go over your factory very carefully to make sure you are adequately protected.

Wholesale Code Authority State Supervisors Named

The following state supervisors and assistant state supervisors were named by the National Code Authority at their meeting July 20:

ALABAMA-W. P. Pollings. ARKANSAS-Henry Leiser.

CALIFORNIA-David B. Nichols, 50 Shotwell St., San Francisco

COLORADO—L. C. Blunt, 1641 Blake St., Denver. CONNECTICUT—A. B. Libano, 339 Greenwich Ave., Greenwich. Assistant Supervisor, Frank Blakeslee, Bradley Smith New Haven

DELAWARE-I. F. Kartman, 130 S. Hanover St., Balti-

DIST. OF COLUMBIA—Hymen Goldman, 635 Indiana Ave. N.W., Washington. FLORIDA—J. M. Turner, Jr. GEORGIA—H. H. Payne.

IDAHO—J. J. Williams. ILLINOIS—H. H. Hiedelbaugh, Decatur. Assistant Supersor, Wesley A. Smith, Blue Island. INDIANA-E. E. Wood Nichols, Nichols Candy Co.,

Indianapolis. -A. W. RUSSELL, O. B. West Co., Des Moines. Assistant Supervisor, Clyde Saterlee, Linn Candy Co., Cedar

KANSAS-Harry B. Williams, Al F. Williams Drug Co.,

KANSAS—Harry B. Williams, Al F. Williams Drug Co., 523 Jackson, Topeka.

KENTUCKY—Sidney Grosman.

LOUISIANA—James J. Reiss.

MAINE—P. F. Griffin, Bates Street Cigar & Conf. Co.,

MARYLAND-I. F. Kartman, 139 S. Hanover St., Balti-

more.

MASSACHUSETTS—James Daly, Essex St., Lawrence.

MICHIGAN—Vene G. Perry, 1528 Gratiot Ave., Detroit.

MINNESOTA—J. J. Shea, 307 N. Washington Ave.,

Minneapolis.
MISSISSIPPI--John Burton.
MISSOURI-Fred Schemeckebier, Schmeckebier Candy Co., St. Louis

NEBRASKA—Edward S. Stebbins, Beselin, Inc., Omaha. NEVADA—H. L. Berney, Donald Co., Grand Island. NEW HAMPSHIRE—Leo B. Dowd, 22 High St., Nashua. NEW JERSEY-James Cooper, Winkler & Navatier, 50

Edison St., Newark.

NEW YORK—William E. Shoudy, 510 S. Clinton St., Syracuse. Assistant Supervisor, Martin Patterson, 498 Seventh Ave.,

NORTH CAROLINA-A. W. Llewallen, Assistant Super-

visor, Buster Forrester.
OHIO—C. C. Lance, 222 W. Front St., Youngstown.
OKLAHOMA—Kenneth E. Ward, 426 Choctaw

RHODE ISLAND-Thomas H. Maloney, 39 Putnam St., Providence.
SOUTH CAROLINA—W. C. Peeler.

TENNESSEE—P. V. Jackson.
TEXAS—S. L. Bacon, Abilene Mfg. Co., Abilene.
VERMONT—Guy T. Vitagliano, Vermont Conf. Co., Bur-

WEST VIRGINIA—J. C. Quarles.
WASHINGTON—E. J. Raymond, 823 Yale Ave., Seattle.
WEST VIRGINIA—Clarence J. Feeny, Wheeling.
WISCONSIN—Ray J. Pihringer, 200 S. Second St., Mil-

"Code Authority Journal" Makes Debut

THE Code Authority Journal, a bulletin published by the Code Authority of the Candy Manufacturing Industry, made its first appearance August 4. It contained information on the Code and the proceedings of the Code Authority at its first official meeting.

The new bulletin, which is prepared at headquarters, 111 W. Washington St., Chicago, will be issued following each Code Authority meeting for the time being. Later it is to be issued monthly. It will be sent to all members of the industry, Code Authority members, and Zone Chairmen.

The N. C. A. Bulletin will be continued as usual.

Possibilities of Cane Sugar in Candy

By DR. WHITMAN RICE
National Sugar Refining Co. of New Jersey
Production Forum Address at N. C. A. Convention

E all know that cane sugar was the foundation upon which this great confectionery business was built and we generally accept it as an old friend and acquaintance and feel that we know quite well all of its habits and tricks. We sometimes find, however, that there is a deeper and more subtle side to this material and it is quite possible at times that we have omitted some proper gesture or consideration which has produced an unexpected result.

There is always an explanation for every effect and it is often founded upon the fact that cane sugar can undergo a swift chemical change which entirely destroys its original character—and even identity—because through this chemical change it is no longer one definite substance but it has become an even mixture of not one but two substances, both of which are radically different from the original, and differ from each other, and it is never possible to restore them to their original form.

This chemical reaction called "inversion" may be occasioned by a considerable number of conditions and substances and the extent of the reaction may be widely modified by the temperature and, particularly, by the amount of water present. It is, therefore, rather difficult to control inversion, especially if we desire to stop it at some point which will result in leaving a definite mixture of cane sugar and invert sugar. It is generally much more satisfactory to add the required amount of invert sugar rather than to try to form it in the batch. It results in a much more uniform product.

Problems of Inversion

It is my desire first to indicate the importance of this characteristic and to give you a somewhat better understanding of what can possibly happen, and hope it may point out ways in which we may better use these properties to our advantage. To show some of the things which can happen, may I give a few extreme instances which can be valuable if they will place you on your guard against a too satisfied opinion of your present knowledge of cane sugar.

For instance—it is possible to heat cane sugar, which has been sufficiently refined for exacting requirements, as high as 350° F., and yet no more than 4 per cent will be inverted. This may be true even though the time required to raise it to this temperature is as much



DR. WHITMAN RICE

as 25 minutes. On the other hand, an extreme case occurred where 1.75 per cent was inverted in a few seconds even though the heat was not applied long enough to cause any discoloration, and cooling followed immediately after the application of the heat. I also know of a case where over one-third of one per cent of very pure, hard grained sugar was caused to invert merely by the heat generated while it was being pulverized in a sugar mill.

These instances may offer a possible explanation for previously unexplained results which you may have witnessed and I hope they may lead you to try and find new ways in which sugar can be used. It is really a wonderful opportunity to have such a versatile substance to work with.

Factors Affecting Results

Some of the physical things which have a very considerable effect on the final results include the size of the batch. This very apparently would be important, as it would largely control the time of heating and might be the cause of over-heating at those surfaces where the heat is applied to the container. Also the amount and rapidity of stirring, aside from that caused by the boiling of the batch, is important. The means of heating likewise affects the results—whether by coal, gas, steam jacket, or steam coils, as these different methods largely affect the intensity of the heat at that point where the kettle is in contact with the batch.

One of the most important and often-times least considered factors is the *length of time* required to bring a batch to a definite temperature. I have frequently been told that heating of each batch was always carefully carried to a definite temperature, but further inquiry has often indicated that the amount of time required had not been considered. At times it was disregarded because it was controlled by the gas pressure or the steam pressure or some other factor over

which the operator had no control; therefore, he had quite naturally left it out of his consideration.

If you will give a moment's thought to the condition which exists during cooking you will realize that there will be a film of greater or lesser thickness which will adhere to the kettle surface, and through its own insulation may create a temperature difference of 30° to 50° between the outer surface of the film and the inner. Due to the sticky nature of dense sugar solutions, this film is but slowly replaced by the main body of the batch and it is undoubtedly true that most inversion and color formation takes place in this film. I am thoroughly convinced that the boiling of water white hard candy would be very easy if the whole batch could be kept moving and the super-heated film be eliminated. At least the better the *stirring*, the less color will form.

The barometer reading is very important because of its influence on the boiling point and it is most important if goods are cooked in a vacuum pan.

In view of these facts, one must arrive at the definite conclusion that it is a real job to boil two batches which shall be identical in their results if different equipment has been used for the two batches, even though the cooking may have been done by the same man and in the same factory. Therefore, never expect any formula to be definite and final until it has been worked out with the equipment and under the conditions which you intend to use for its production. The successful formula is a result of a considerable number of trials and actual practice which have enabled you to make necessary adjustments in order to produce exactly that which it is desired to make.

Non-Moisture Proof Wrappers May Cause Inversion

The wrapper is as important as the actual production of the candy. I have some pops that were made over four years ago and which were then put in a tight preserve jar. They are now apparently in the same condition as when they were first made.

The importance of the presence of moisture may be well understood if you remember that cane sugar must have moisture in order to invert. You must realize that nothing can be absolutely waterproof, because difference in temperature will cause air to flow through most wrapping materials, and the air will carry some moisture with it. It has been found possible to sterilize all types of tightly wrapped foods by placing them in the presence of certain gases after first creating a partial vacuum. These gases enter the package even though it is supposed to be air-tight, and will pass through the wrapping material in sufficient quantity to kill insects and destroy their eggs. Therefore, you will see that many supposedly waterproof wrappings are only relatively so and their protection is limited to a more or less definite time, depending upon their nature.

Understand Your Ingredients

The best possible way to make a good product and to avoid trouble is to know the characteristics of all the ingredients you are using. With this knowledge you can always find a reasonable explanation for such results as are not satisfactory. You will then be able to make such changes in your formula or your method of operation as will permit you to gain the desired results.

There are some general characteristics which should always be borne in mind. We can always expect cane sugar, unless modified by other substances, to crystallize readily. If we wish to regard this action, the customary method is to use invert sugar, which will modify the final product and tend to make fondant very short. The other common ingredient is corn syrup. If this is used we must realize that it is generally composed of three substances, one of which is dextrine-which tends to toughen any mixture into which it enters. A clearer idea may be gained if we know that most mucilage is made of similar dextrines and water. In many cases this property is desirable, but not always so. It is usually simple enough to gain the desired results by slowly changing the formula with the above mentioned factors in mind.

Sweating of fondants or similar pieces will usually result from a cook that has been finished at a temperature which was too low, since it naturally must be caused by the presence of too much moisture left in the piece. If a higher cook makes the piece too tough, then more invert sugar should be present to shorten it. Invert sugar tends to retain moisture probably more than an equal amount of corn syrup. Therefore, the addition of invert sugar should not be carried to an extreme, as it may later attract to itself too much moisture from the atmosphere.

Bursting centers are usually caused by the growth of certain types of yeast, and this growth may be stopped by higher cook, which will dry them up by boiling off more water. Then, if necessary, invert sugar may be added to attain the desired softness.

It is preferred in many instances to produce hard centers which may contain invertase, and invert sugar will be produced after the center has been coated. This method is commonly used to produce many modern, delightfully soft centers.

My experience has not allowed me to spend many years in the production of confectionery, but I believe that I can truthfully say that a clear understanding of what type of piece was desired and a careful consideration of the characteristics of the ingredients which would normally enter such a piece have enabled me, when required, to produce satisfactory results. I am very much of the opinion that a clear understanding of your ingredients is far more valuable than a formula, however perfect it may have been found when used in some other factory.

If you will consider for a moment the wide range of marketable goods produced by the average confectioner,—extending from clear hard candies to soft fondants, and from satin-finish filled goods to marshmallows—it is undoubtedly true that a continued increase in your knowledge of the possible things which can be accomplished with cane sugar would indicate an almost endless range of further possibilities.

Southern Wholesalers Line Up Under Code at Convention

S.W.C.A. Atlanta Convention Keyed to Code Compliance Discussions; New Constitution is Adopted; H. H. Payne, Pres.; Herbert Tenzer Describes NRA and Jobber Code; Association Recommends Factories Pack 20 and 100 Count

HE Southern Wholesale Confectioners' Association, in one of its largest conventions in recent years, held July 23 to 26 at the Biltmore Hotel in Atlanta, Ga., keyed its three-day meetings to discussions on jobber operations under the newly approved Wholesale Confectioners' Code.

Featured speakers on the Code included Herbert Tenzer, Executive Secretary and Counsel of the Code Authority for the Wholesale Confectionery Industry, who journeyed from New York to make his initial appearance before the Southern jobbers on Code matters. W. L. Mitchell, NRA compliance director for the State of Georgia, discussed Code Compliance and Enforcement, from the government's point of view.

Recommend 20 and 100 Count

Of special interest to manufacturers was the recommendation passed by the convention that 5 cent candies and chewing gum be packed 20 count instead of 24, and that penny goods be packed 100 count instead of 120. Reasons given were to simplify invoicing and figuring discounts, and generally standardize uniform packaging. These suggestions came as a surprise to many outside the association, as it was quite universally believed that the industry had largely agreed upon preference for the 24 and 120 count standards of packing.

New Constitution Adopted

A new constitution for the association was adopted, to conform to many provisions for operation under NRA. The office of vice-president was extended to two offices—first and second. Representation on the governing board of directors was provided for each state by membership of a state chairman from each of the 11 states in the Southern territory.

H. H. Payne, of the Willis-Pause Co., Atlanta, was elected President for the coming year, succeeding James J. Reiss, two-term President. Mr. Payne has served as President of the Atlanta Confectioners' Association and Chairman of the North Georgia Code Authority.

James M. Turner, of Turner-Taylor Co., Tampa, Fla., was chosen First Vice-President, and A. R. Liddell, of Liddell Candy Co., Shreveport, La., was named Second Vice-President.

W. M. Wallace, of Brower Candy Co., Atlanta, was re-elected Treasurer for his fourth term. C. M. Mc-Millan was re-elected Secretary.



HERBERT TENZER
Exec. Secretary and
Counsel,
Wholesalers' Code
Authority

Tenzer Talks on Code and NRA

In his address on the development of the Whole-salers' Code and compliance under it, Mr. Tenzer pointed out that regardless of the future of NRA the jobbers would need a code and that he believed the majority wanted it permanently. He reviewed the formative and administrative stages of NRA and the relationship of the jobber code to the national movement.

The First Stage of NRA

"The first stage of NRA was almost completed on July 16, 1934, when the Blue Eagle celebrated its first birthday," said Mr. Tenzer. "This stage included the codification of industry, resulting in over 500 codes with master codes for wholesale, retailer, and service trades and with a so-called clean-up code for small industries not yet codified. There are about 250 additional codes filed and waiting final approval.

The Second Stage

"Attention will now be concentrated on the administrative stage of NRA. Proper organization of Code Authorities, preparation of their by-laws, and budgets, are of first importance. (When a budget is approved by the Administrator, and a basis of assessment determined in accordance therewith, failure to pay the membership assessment to the Code Authority will be considered a violation of the Code Eagle.) While this organization and administrative work is going on, Code enforcement is not being neglected. Code authorities are either cooperating with the state and local compliance directors or have obtained the administrator's approval to their own plan for handling trade practice complaints.

Future of NRA

"There is much conjecture with respect to the future of NRA. Those who never favored any of Roosevelt's policies, good or bad, express the opinion that NRA

will be through in 1935. The flood of telegrams which arrived in Washington at the time the Code was taken from the service trades convinces me that industry wants their codes. Of course there will be the chiseler who never did want the Code, and now that he has it, he spends his time figuring how to beat it rather than how to comply with it.

"It seems almost inevitable that certain features of NRA will be continued and be made a permanent part of the laws of the land. There is a general tone of confidence in business marred by labor unrest, but yet I do not believe that the emergency which caused the passage of NRA has ceased to exist. The next ten months of Code administration will tell the story of its

future.

"I feel sure that my confidence is not misplaced when I say that the wholesale confectioners of the country will be more successful under the Code operation than they have been in the past several years. Should this be the result, I am certain that we will not want to lose our Code. Without debating the pros and cons regarding details of the program of the present administration, we cannot help but subscribe to the effort of the administration to introduce intelligent planning into our national affairs.

Our Industry

"It is only by intelligent creation and carrying out of a plan that our industry can be made to progress,

rather than degenerate into further chaos. "We may draw an analogy of this situation in our industry. For a year a committee of six men worked anxiously, untiringly and unselfishly to devise a plan for the improvement of the industry. This plan resulted in our Code of Fair Competition. It is a good Code and it permits the adoption of a suitable program for industrial planning and for such other steps as may be devisable to shift the wholesale confectioner into his proper place in the sun.

"When Tugwell defended his 'Brain Trusters' by asking a question as to what other part of the anatomy the people preferred to have the country run by, he won one over to the brain trusts. Each and every member of our industry is a member of our brain trust. We are at all times open to suggestion and criticism. Much of this criticism will necessarily be directed at me because of the position I hold, but you may be sure that I am at all times ready and willing to accept

your constructive suggestions."

S. W. C. A. Membership Doubled

Retiring President Reiss reported that the association had doubled its membership in the past year. Many of the new members were obtained by the manufacturers' representatives traveling in the South. J. D. Pullen, a Memphis broker, was awarded the Winchester Cup for greatest service to the association during the year, in signing up 35 new members.

A feature in connection with the Code compliance discussions was a mock trial of different types of jobbers on the charge of selling below cost. Malcolm A. McDonnel, of Puritan Chocolate Co., Cincinnati, an authority on jobbing costs, served as prosecuting attorney. A. J. Hirsch, a live-wire jobber of Asheville, N. C., functioned as defense attorney.

The manufacturers of the industry were well repre-

sented in the numerous exhibits of products featured in the candy show held in conjunction with the convention.

National Confectioners' Association **Enrolls 54 New Members**

ENLARGEMENT of the N. C. A. membership roster has occurred to a remarkable degree in the past two months. Since the first Code Authority meeting, in June, 54 new members have joined the association. They are as follows:

A. B. Manheim, Alameda, Cal. Milly Cubbard, Berkeley, Cal.

Four O'Clock Sweets, Hawthorne, Cal.

Schurra's, San Mateo Co., Cal. Five in Los Angeles, Cal.: Colby & McDermott (Abba Zaba), Doumak Marshmallow Co., John O. Gilbert Choc. Co. of Calif., Ltd., Famo Products Co.,

and Jaffe Candy Co. Hexo Candy Co., Lynwood, Cal.

Seven in Oakland, Cal.: A. E. Augenstein, Edy's, Fox Cross Candy Co., Herman Goelitz, Jas. R. Gordon, Henry M. Lekas and Oakland Gum Co. University Creameries, Ltd., Palo Alto, Cal. Electric Candy Land, Petaluma, Cal.

Seventeen in San Francisco, Cal.: Allegretti, Bryson Candy Co., Candy Shoppe, Inc., Cora Lou Candy & Marzipan Co., Delicious Candy Co., Foster & Orear. Goldberg, Bowen & Co., Lyon-Magnus, Inc., L. D. McLeon Co., Marb Chocolate Co., Maskey's, Mission Candy Co., Nasser Candy Co., Peoples Candy Factory, Rosemary Candy Co., Whistle Candy Co., Martin Zeiss, and Gold Bond Candy Co.

Partrick's, Palo Alto, Cal.

Three in San Jose, Cal.: O'Brien's, Inc., Naas Candy Factory, San Jose Creamery.

Vlahos Candy Co., San Leandro, Cal. L. Colonica, Santa Clara, Cal. L. A. Pan Conf. Co., Lawndale, Cal. Mardi Candy Co., New Haven, Conn.

Two in Chicago, Ill.: Close & Company, and Ferrara Panned Candy Co.

Homer J. Williamson, Inc., Indianapolis, Ind. J. C. Claeys, South Bend, Ind. Palmer Candy Co., Sioux City, Iowa. E. F. Kemp, Inc., Somerville, Mass. Meadors Manufacturing Co., Greenville, S. C. Ostler Candy Co., Salt Lake City, Utah. R. H. Hardesty Co., Inc., Richmond, Va.

J. Louis Rubel Elected Chairman Zone 7

J. LOUIS RUBEL, Manager of the Veribrite factory, Chicago, a branch of the National Candy Company, has been elected chairman of Zone 7, N.C.A. Industrial Recovery Division. Mr. Rubel succeeds Ferdinand A. Bunte, of Bunte Brothers, Chicago. Mr. Bunte resigned prior to taking up the arduous duties connected with serving as a member of the Code

Mr. Rubel has spent considerable time in the candy manufacturnig business, starting as a salesman for the National Candy Company 20 years ago in Buffalo. He later became Manager of the Buffalo Factory of the National Candy Company. Engaged in this capacity for two years, he then went to Chicago as Assistant Manager of the Veribrite Factory for three years. Mr. Rubel has headed the Veribrite Factory as Manager for the past five years.



The Candy Clinic is conducted by one of the most experienced superintendents in the candy industry. Some samples represent a bona-fide purchase in the retail market. Other samples have been submitted by manufacturers desiring this impartial criticism of their candies, thus availing themselves of this valuable service to our subscribers. Any one of these samples may be yours. This series of frank criticisms on well-known, branded candies, together with the practical "prescriptions" of our clinical expert, are exclusive features of the M. C.

Summer Candies and Packages

Code 8A 34

Cream Almond Bar-2 oz.-5c (Purchased in a restaurant, Inlet,

Appearance of Bar: Good: 2 pieces: Cellophane wrapper printed in gold and red with boat.

Coating: Good. Center: Good. Texture: Good. Taste: Good. Almonds: Good.

Remarks: This is a good eating cream

almond bar

Code 8B 34

Basket of Fruit-About 3 oz.-10c (Purchased in a chain store, Saratoga Springs, N. Y.)

Appearance of Package: Good; box chip board basket packed with assorted fruit made of light short marshmallow. Amber Cellophane covers top.

Colors: Good. Texture: Good. Taste: Good.

Remarks: This is a good 10c novelty box for this type of candy.

Code 8C 34

Salt Water Taffy-About 2 oz.-5c (Purchased in Glens Falls, N. Y.)

Appearance of Package: Good; Cellophane bag used, no weight, name or address printed on bag.

Colors: Good. Texture: Tough. Flavors: Good.

Remarks: This is a good size bag of salt water taffy at the price of 5c. Taffy in poor condition, papers stuck to candy, could not remove.

Code 8D 34

Large Marshmallows-8 oz.-10 (Purchased in a chain store, Saratoga Springs, N. Y.)

Appearance of Package: Good; printed Cellophane bag used.

Color: Good.

Texture: Too short.

Flavor: Good.

Remarks: This is a good looking 10c bag of marshmallows but marshmallows are too short and dry.

Code 8E 34

Assorted Twists-31/2 oz.-5c

(Purchased in a chain store, Saratoga · Springs, N. Y.)

Appearance of Package: Good; Cellophane wrapper tied with blue grass

Colors: Good.

Twists: Partly grained.

Flavors: Very weak in most all of the

pieces.

Remarks: This is a large 5c package of hard candy and very little profit can be made, if any. Suggest retailing this package at 10c after using enough flavors so that they can be tasted

Code 8F 34

Assorted Salt Water Taffy-17/8 oz.-5c

(Purchased in a drug store, Inlet, N. Y.)

Appearance of Package: Good, but very small looking; colored wraps, Cellophane bag.

Colors: Good. Texture: Good. Flavors: Good.

Remarks: Paper wrappers were badly stuck to the candy. This is good eating salt water taffy. Weather conditions no doubt were the cause of the wrappers sticking to the candy.

Code 8G 34

Hard Candy Pops-4 oz.-5c

(Purchased in a chain store, Saratoga Springs, N. Y.)

Appearance of Package: Good. Fine round pops inserted into a printed board, bell shape, wrapper of Cellophane, fastened with a rubber band.

Colors: Good. Condition of Candy: Good.

Flavors: Good.

Remarks: This is a large package of pops at the price of 5c. The manufacturer cannot make a fair profit on a 5c number of this size.

Code 8H 34

Cream Mints-21/4 oz.-5c

(Purchased in a chain store, Saratoga Springs, N. Y.)

Appearance of Package: Good; Cellophane bag printed in blue.

Color: Good.

Texture: A trifle hard. Flavor: Good but weak.

Remarks: This is a poor eating candy unless it is well flavored.

Code 8I 34

Large Marshmallows-1/2 lb.-10c (Purchased in a grocery store, Lake Geneva, Wis.)

Appearance of Package: Good; printed

Cellophane bag used. Color: Good.

Texture: Good. Flavor: Good.

Remarks: This is a good eating marshmallow and makes a good sized 10c package.

> Code 8J 34 Cream Mints-6 oz.-10c

(Purchased in a grocery store, Lake Geneva, Wis.)

Appearance of Package: Good; printed Cellophane bag, board on bottom.

Texture: Too hard.

Flavor: Hardly any flavor could be tasted.

Size of Pieces: Good.

Remarks: This is a good looking package of mints but suggest considerable more mint flavor be used. A piece of this kind is not good eating unless it is soft.

Code 8K 34

Spiced Jellies-5 oz.-10c

(Purchased in a grocery store, Lake Geneva, Wis.)

Appearance of Package: Good; open face, long narrow tray, printed Cellophane wrapper.

Colors: Good.
Texture: Good.
Flavor: See remarks.

Crystal; None; sugared.

Remarks: Jellies are good but entirely too much spice is used, it overcomes the flavors and after eating one or two pieces I doubt if anyone would eat any more. The spice almost burns the mouth. Suggest the spice be cut down so that the flavors can be tasted.

Code 8L 34

Peanut Caramel Bar-1 oz.-5c

(Purchased in a grocery store, Lake Geneva, Wis.)

Appearance of Bar: Good; weight over 2 ozs. Cellophane wrapper, gold seal.

Caramel-

Color: Good. Texture: Good.

Taste: Too much salt used.

Center-

Vanilla Fudge: Good..

Peanuts: Good.

Remarks: This is a good eating caramel peanut bar but entirely too much salt is used.

Code 8M 34

Candy Acorns-5 oz.-10c

(Purchased in a drug store, Inlet, N. Y.)

DUE to limited space, it is possible to include only a cross section of the goods available under the different types and classifications of candies brought to the Candy Clinic each month for examination. Partiality and discrimination play absolutely no part in our selections. Lesser known merchandise is sometimes given preference over merchandise that has already established itself favorably in the eyes of the consumer, and to that extent only can we be considered discriminatory.

Bearing this fact in mind it is evident that the market holds many excellent confections which never reach the Candy Clinic for examination. Such being the case, any opinion we might express in these columns as to the superiority or inferiority of any item analyzed, is in no sense a fair basis for comparison with any of the many other confections of the same type which do not happen to be among the items examined at that particular time.

—Editor.

Appearance of Package: Good: printed cellophane over a flat board.

Color: Good.

Texture: Too hard.

Flavor: Good.

Remarks: Flavor and shape of piece are good, but it is entirely too hard for this type of candy.

Code 8N 34

Chocolate Covered Peppermint Creams—22 pieces—10c

(Purchased in a chain store, Saratoga Springs, N. Y.) Appearance of Package: Good: Chocolate colored tray printed with gold; Cellophane wrap.

Coating: Good.

Center— Texture: Good.

Flavor: Good.

Remarks: This is a good eating peppermint cream, neatly put up, but the profit, if any, is very small for the manufacturer. The weight must have been at least 3½ to 4 ozs.

Code 8O 34

Assorted Spice Strings—8 oz.—10c

(Purchased in a cigar store, Boston, Mass.)

Appearance of Package: Good; open face, red printed tray, wrapper of Cellophane, red and gold seal.

Colors: Good.
Texture: Good.
Flavors: Good.

Crystal: None; sugared.

Remarks: This is a good 10c package of spice strings.

Code 8P 34

Iced Peanut Fudge Bar— 2½ oz.—5c

(Purchased in a retail candy store, San Francisco, Calif.)

Appearance of Bar: Good; Cellophane wrapper, gold printed band.

Coating of Icing: Good.

Caramel: Good.

Center: Chocolate fudge; good.

Peanuts: Good.

Remarks: This is a good eating iced bar and of good size.

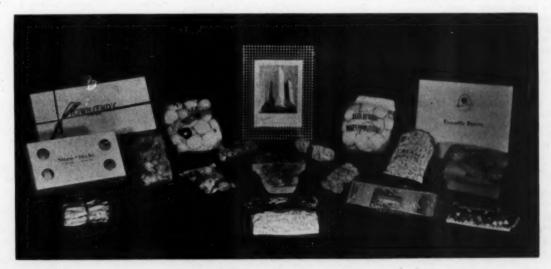
Code 8Q 34

Summer Assorted Candies—1 lb.— 65c

(Purchased in a railroad station, Chicago, Ill.)

Appearance of Package: Good.

Box: Book shape, black and white squares. Scene in center of Century of Progress. Neat and attractive



CLINIC SCHEDULE FOR 1934

Manufacturers Invited to Submit Samples

N ANNOUNCING its schedule of the various types of candies to be analyzed and discussed by the Clinic each month during 1934, the MANUFACTURING CONFECTIONER invites candy manufacturers desiring an impartial appraisal of their samples to send two of each item to its publication offices, 1140 Merchandise Mart, Chicago, by the 10th of the month preceding the month each type is to be discussed. The retail price range should be mentioned. This service will be extended to subscribers without charge. Identifications are confidential.

Clinic schedule for 1934 is as follows: JANUARY—Holiday Packages; FEBRUARY-Hard Candies, 10c-15c-25c Packages Different Kinds of Candies; MARCH-Assorted 1-pound Boxes of Chocolate up to \$1.00; APRIL-Easter Packages, Moulded Goods, Chocolate Bars; MAY-\$1.25-\$1.50-\$2.00 Chocolates; JUNE-Marshmallows, Fudge, Caramels; JULY-Gums, Jellies, Undipped Bars; AUGUST-Summer Candies and Packages; SEPTEMBER-All Bar Goods, 5c numbers, 1c pieces; OCTOBER—Salted Nuts and Chewy Candies; NOVEMBER— Home Mades, Cordial Cherries, Panned Goods; DECEMBER-Best Packages and Items of Each Type Considered During Year; Special Packages, New Packages.

looking, Cellophane wrapper, tied with grass ribbon.

Appearance of Box on Opening: Good.

Chocolate Coated Pieces-

Coating: Dark. Color: Good. Gloss: Good. Strings: Fair. Taste: Good.

Centers-

Cream Peppermint: Good. Hard Taffy: Good. Ting Ling: Good. Vanilla Buttercream: Good. Vanilla Nut Judge: Good. Jelly: No flavor could be tasted. Nut Paste Center: Good. Marshmallow Jelly: Good. Lemon Jelly: Lacked flavor. Orange Jelly: Lacked flavor. Unwrapped Chocolote Caramel Roll: Good.

Wrapped Chocolate Caramel and Nougat: Good. Wrapped Nut Nougat: Good.

Wrapped Vanilla Nut Nougat: Good. Wrapped Molasses Chew: Good. Wrapped Butterscotch: Good.

Wrapped Nut Taffy Chew: Good. Wrapped Molasses Nut Chew: Good. Wrapped Peanut Taffy: Good.

Assorted Sugared Hard Candy Wafers:

Assorted Hard Candy Sugared Sticks: Maple Coconut Bonbons: Good.

Vanilla Coconut Bonbons: Good. Puffed Rice Taffy: Good. Assortment: Good.

Remarks: This is a good assortment of summer candies. Suggest the chocolate coated pieces be dipped in a good milk chocolate coating. day after this box was purchased, owing to the hot weather the chocolate pieces had melted. The jelly pieces need more flavor. The sugared sticks and wafers would taste better if less acid were used and more flavor.

Code 8R 34

Candy Coal-1/2 lb.-40c

(Purchased in Chicago, Ill.) Appearance of Package: Good.

Box: One-layer, colored in gray, white.

black and gold. Picture in center of a coal pail full of coal. This piece is a hard coated semi-cara-

mel, flavored with licorice, colored black, cut in small pieces. This piece is also made flavored coffee and moulded to look like a coffee bean.

Color: Good. Texture: Good. Taste: Good.

Remarks: This is a very fine summer candy as it does not stick nor grain. A good eating piece of candy and well made. Suggest a little more coffee flavor be used in the coffee pieces.

Code 8S 34

Cream Mints-1/2 lb.-10c

(Purchased in a grocery store, Lake Geneva, Wis.) Appearance of Package: Good. Printed Cellophane bag used. Piece is a small after-dinner mint.

Texture: Good. Flavor: Fair.

Size of Piece: Good.

Remarks: This is a good looking mint package and cheaply priced. Suggest more mint flavor be used.

Code 8T 34

Jelly Mints-31/2 oz.-10c

(Purchased in a drug store, Lake Geneva, Wis.)

Appearance of Package: Good; printed Cellophane bag used.

Mint Jacket-Texture: Good. Flavor: Good. Center-

Color: Good. Texture: Good. Flavor: Good.

Remarks: This is a good eating jelly mint.

Code 8U 34

Assorted Sugar Wafers—1 lb.—29c

(Purchased in a drug store, Boston, Mass.)

Appearance of Package: Good for this priced candy. White, full telescope box, four holes, one in each corner. Cellophane wrap.

Colors: Good.

Texture: Considerable spots and some of the wafers stuck to the paper. Considerable sweating.

Flavors: Good.

Remarks: This is a neat way to pack sugar wafers. Quality of the candy was good.

Code 8V 34

Assorted Summer Sweets-1 lb.—39c

(Purchased in a drug store, Boston,

Appearance of Package: Good. Box: One-layer, buff color, printed in green, Cellophane wrapper

Appearance of Package on Opening: Good.

Cellophane Wrapped Caramels (Vanilla and Chocolate)-

Colors: Good. Texture: Good. Flavors: Good. Assorted Gums

> Colors: Good. Texture: Too short and pasty.

Flavors: Weak. Gum Patties-

Colors: Good. Texture: Too short and pasty.

Assorted Cream Wafers-Colors: Good.

Flavors: Weak. Wrapped Butterscotch-Colors: Good. Flavor: Poor. Texture: Good.

Assortment: Fair.

Remarks: The gum pieces are not made right as they were very short and not good eating. Flavors are (Turn to page 54)

****	4	ALI	GUS	ST	19	34
193	Aton I	Tue	Wed	Thu	Fri	Sel
5 12 19 26	6 13 20 27	7 14 21 28	1 8 15 22 29	9 16 23 30	3 10 17 24 31	11 18 25

1934 SEPTEMBER 1934

Sun Mon Tue Wee Thu Fri Set

2 3 4 5 6 7 8

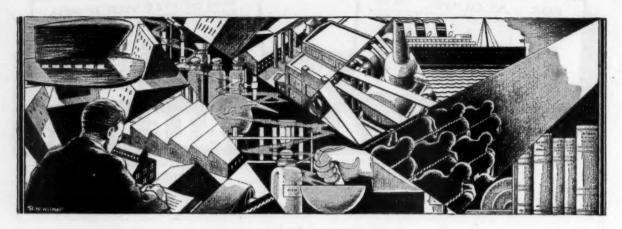
9 10 11 12 13 14 15

16 17 18 19 20 21 22

33 24 25 26 27 28 29

26 27 28 29 30 31 25 Jhe 16 17 18 19 20 21 22 29 29 29 20 21 22 29 29 29 20 21 25 26 27 28 29 29 20 21 25 26 27 28 29

August 8th Month				September 9th Month			
-	(4	Saturdays Sundays	30 D		§ 5 Saturdays § 5 Sundays		
Day of Month	Day of Week	EVENTS	Day of Month	Day of Week	EVENTS		
1	w	Monthly meeting Retailers Confectioners' Assn. of Philadelphia, Inc Turngemeinde Hall, 1705	3	м	Labor Day.		
		Monthly meeting Retailers Confectioners' Assn. of Philadelphia. Inc Turngemeinde Hall, 1705 North Broad St. Philadelphia.—Weekly meeting (every Wednesday evening) Merrimac Valley Wholesale Candy Jobbers' Assn., Y. M. C. A., Lawrence, Mass.—Weekly meeting Colorado Confectioners' Association, Chamber of Commerce, Denver (every Wednesday).—Monthly meeting Southern N. E. Wholesale Confectioners' Assn., Inc., Remington Hall, Y. M. C. A., Fall River, Mass.	5	w	Monthly meeting Retailers Confectioners' Assn. of Philadelphia, Inc., Turngemeinde Hall, 1706 North Broad St. Philadelphia.—Weekly meeting (every Wednesday evening) Merrimac Valley Wholesale Candy Jobbers' Assn., Y. M. C. A., Lawrence, Mass.—Weekly meeting Colorado Confectioners' Association, Chamber of Commerce, Denver (every Wednesday).—Monthly meeting Southern N. E. Wholesale Confectioners' Assn.,		
2	Th	Weekly meeting Westchester County Candy Jobbers' Assn., Jewish Community Centre, Yonkers, N. Y.—Monthly meeting Cincinnati Candy Jobbers' Assn., Grand Hotel, Cincinnati.—Weekly meeting Keystone Jobbing Assn., Chamber of Commerce Bldg., Scranton, Penn. (Weekly, 7:30)			Denver (every Wednesday).—Monthly meeting Southern N. E. Wholesale Confectioners' Assn., Inc., Remington Hall. Y. M. C. A., Fall River, Mass.—Monthly meeting Manufacturing Confectioners of Baltimore, Hotel Emmerson, Baltimore, Maryland.		
		p. m.)	6	Th	Weekly meeting Westchester County Candy Jobbers' Assn., Jewish Community Centre, Yonkers, N. Y.—Monthly meeting Cincinnati Candy Jobbers' Assn., Grand Hotel, Cincinnati.—Weekly meeting Keystone Jobbing Assn., Chamber of Commerce Bldg., Scranton, Penn. (Weekly, 7:30		
3	F	Weekly meeting Utah Manufacturers' Assn. (each Friday). Salt Lake City Chamber of Commerce, Salt Leke City, Utah.—Monthly meeting Falls Cities Confectioners' Club, Louisville, Ky.			Commerce Bldg., Scranton, Penn. (Weekly, 7:30 p. m.)		
6	M		7	F	Weekly meeting Utah Manufacturers' Assn. (each Friday), Salt Lake City, Utah.—Monthly meeting Falls Cities Confectioners' Club, Louisville,		
		Monthly meeting the Candy Production Club of Chicago, DeMet's, I N. LaSalle St., Chicago.—Monthly meeting Central N. Y. Candy Jobbers, Hotel Syracuse, N. Y.—Chicago Candy Club bimonthly meeting, Maryland Hotel, Chicago.	8	Sa	Kentucky. Monthly meeting Kansas City Candy Club. Pickwick Hotel, Kansas City, Mo., in the evening.		
8	w	Monthly meeting Manufacturing Confectioners of Baltimore, Hotel Emmerson, Baltimore, Md.	10	м	Monthly meeting the Candy Production Club of Chicago, De Met's, 1 N. La Salle St., Chicago. —Monthly meeting Central N. Y. Candy Jobbers, Hotel Syracuse, N. Y.		
11	Sa	Monthly meeting Kansas City Candy Club. Pick- wick Hotel, Kansas City, Mo., in the evening.	11	Tu	Monthly meeting Conf. Buying Assn., 17 E. Austin Ave., Chicago.		
13	М	Annual meeting of National Food Distributors' Assn., William Penn Hotel, Pittsburgh, Pa.	12	w	Monthly meeting Manufacturing Confectioners of Baltimore, Hotel Emmerson, Baltimore, Md.		
14	Tu	Monthly meeting Conf. Buying Assn., 17 E. Austin Ave., Chicago.	15	Sa	Sweetest Day just a month off!		
16	Th		17	M	Bi-monthly meeting Chicago Candy Club, Maryland Hotel, Chicago.		
		Monthly meeting the New York Candy Club, Inc., Masonic Temple. N. Y. C.—Bi-monthly meeting Assn. of Mfrs. of Conf'y and Chocolate of State of N. Y., Pennsylvania Hotel, N. Y. C. (middle and last of month).—Monthly meeting Utah-Idaho Zone Western Confectioners' Assn., Salt Lake City, Utah.—Chicago Candy Day Picnic, Chicago.	18	Tu	Monthly meeting of Candy Executives' and Asst'd Industries Club, St. George Hotel, St Clark St., Brooklyn.		
20	М	Bi-monthly meeting Chicago Candy Club, Mary-land Hotel, Chicago.	20	Th	Monthly meeting the New York Candy Club, Inc., Masonic Temple, N. Y. C.—Bi-monthly meeting Assn. of Mfrs. of Confly and Chocolate of State of N. Y., Pennsylvania Hotel, N. Y. C. (middle		
21	Tu	Monthly meeting of Candy Executives' and Asst'd Industries Club, St. George Hotel, 51 Clark St., Brooklyn.			Zone Western Confectioners' Assn., Salt Lake City, Utah.		
25	Sa		22	Sa	Monthly meeting the Pittsburgh Candy Club, Pitts- burgh, Penn.		
		Monthly meeting the Pittsburgh Candy Club, Pitts- burgh, Penn.	24	M	Boston Conference on Distribution, Hotel Statler, Boston.		
28	Tu	Monthly meeting Candy Square Club of N. Y. City, Inc., Hotel McAlpin, New York City.	25	Т	Be ready with your Hallowe'en novelties-it's only a month away.		
30	Th	Monthly meeting of Mfrs. of Conf'y and Chocolate of State of N. Y., Pennsylvania Hotel, New York. —N. J. Wholesale Confectioners Board of Trade, Hotel Douglas, N. J.	27	Th	Monthly meeting of Mfrs. of Conf'y and Chocolate of State of N. Y., Pennsylvania Hotel, New York.—N. J. Wholesale Confectioners Board of Trade, Hotel Douglas, N. J.		



Monthly Digest of CURRENT TECHNICAL LITERATURE

U. S. Department of Agriculture



Notices of Judgment Under the Food & Drugs Act, F. D. 20534.

A PRODUCT known as "Eggrowhite," produced by a Baltimore firm, was seized and destroyed by the Department because the dried egg albumen which it gave the impression of containing exclusively was adulterated with an approximately equal quantity of starch, and also because it contained saponin, a foaming agent frequently associated with poisonous substances, which might have rendered it deleterious to health. The manufacturer produces bakers' and confectioners' specialties and it is presumed that the product was intended for consumption in these fields.

Old-Time Tin Shop



The Staley Journal, February, 1934.

THE Staley people operate their own sheet metal shop, building their own conveyors and their own fans and Cyclone dust collectors for handling corn cleaning waste, starch, oil cake, soy meal, etc. Over a hundred independent collecting and conveying systems are in use in this plant. Bulk cocoa powder manufacturers might do well to consult with these people and profit by their experience in laying out the collecting and seperating systems which are in use at this plant.

Ethylene Gas Removes Husks from Walnuts

Dept. of Agr. News Release No. 818.

ETHYLENE, a gas recently originated by Department of Agriculture chemists to aid in the development of a desirable color in citrus fruits has been

adopted by walnut growers as an aid in removing husks from "stick-tight" nuts. It is believed that the gas will materially reduce the percentage of culls and lead to revolutionary changes in the harvesting of walnuts. What effect the gas may have upon the color of the walnut is not stated in the dispatch.

Recent Acquisitions Regarding the Biochemistry of Cacao; Their Importance to Its Production



F. Heim de Balsac. Compt. rend. acad. agr. France 19, 862-71.

IN addition to vitamin A, it has been found that cocoa beans contain two substances possessing antirachitic (bone-building) properties. The shells are a rich source of these substances. It is suggested that the valuable nutritive properties of the raw bean should be conserved by special preservative treatment immediately after harvesting and no fermentation permitted to take place until it can be carried out under carefully controlled conditions in the chocolate factory.

The Utilization of Wood for the Production of Foodstuffs, Alcohol and Glucose



Friedrich Bergins. Chemistry and Industry, 1933, 1045-52; Trans. Inst. Chem. Engrs. (London).

Sea Water

Abel Boulet, Fr. 752,895.

THIS patent covers a method of making the vital and nutritive properties of sea water available for use in cooking operations.

An Automatic, Modified Falling-Sphere Viscometer



B. A. Jones, Ind. & Eng. Chem., Anal Ed., Vol. 6, No. 1.

A HIGHLY ingenious viscosimeter which might reasonably be adapted for chocolate work is described by this physicist who designed it for use in measuring the viscosity of viscous liquids such as rubber cements. A steel ball released by an electromagnet rolls down an inclined guide immersed in the liquid to be tested. When it reaches the bottom of the guide after overcoming the resistance of the liquid, it comes into contact with a stop which actuates a timing device, the latter recording the time lapse between the start and finish of the descent as the index of liquid's viscosity.

Corn in China



Dept. of Agriculture. News release No. 816.

NOTWITHSTANDING the fact that corn, from which our corn syrups, starches, and corn sugars are made, originated on the Western hemishpere, Dr. Walter T. Swingle of the U. S. Department of Agriculture has definite evidence that it was grown in China years before the English settlers took up its cultivation at Jamestown. It probably was brought back to Europe by the returning conquistadores and relayed to China by way of Arabia and Thibet or Turkestan.

U. S. Dept. of Agriculture — Notices of Judgment Under the Food and Drugs Act; No. 20716

A QUANTITY of chocolate covered candy labeled "milk chocolate covered cream peanut clusters" was adjudged misbranded for the reason that the coating was prepared with skim milk instead of whole milk.

(If you are buying your milk coatings at an abnormally cheap price it is suggested that you send them out to some good local laboratory occasionally and see if by any chance there is a reason for it.—Editor.)

Sugar Sirup



Ulrich Heubaum. Fr. 752,717 (1933).

THE inventor takes plant juices containing polysaccharides and converts them into a sugar syrup, obtaining the acid necessary for their conversion into sugars by electrolysis.

Microdetermination of Lactose

J. M. Clavera and F. Moreno Martin. Bull. Soc. Chem. 53, 1103.

THE authors describe a method of determining milk sugar, similar to that recently described by Fromageot and Moulin, based on an adaptation of the well-known method for determining dextrose.

The Preparation of Crystalline Lactic Acid



Henry Borsook, Hugh M. Huffman and Yun-Pu Lin. J. Biol. Chem. 102, 449-60.

A METHOD is described for preparing lactic acid in crystalline form from the commercial syrup. Of possible interest as an acidifying agent in the preparation of certain types of candy.

Use of Some Micro-Organisms in Sugar Analysis

Victor J. Harding and Thomas F. Nicholson, Biochem. J., Vol. 27, pp. 1082-94 (1933).

A BACTERIAL strain has been developed as an analytical reagent for glucose; another for maltose, and a system of carbohydrate analysis is suggested.

Choose the Right Bait to Combat Plant Pests

Harry Stiner. Food Industries. March, 1934, 113, 144.

FORMULAS are given for preparing sprays, dusts, baits, etc., for a variety of common plant pests.

Citrus Fruit Products



Nicola Parravano. Giornale di chimica industriale ed applicata, 15, 213-19.

SICILIAN chemists believe that with proper production methods it will be possible to make natural byproduct citric acid compete successfully with the fermentation citric acid which has flooded the market in recent years. Also, a way has been found to stabilize the citrus oils during machine production processes so that high quality can be maintained without resorting to the sponge, or hand labor method.

Deterpenized oils are constantly assuming greater importance in Italy, as is also the production of pectin from lemon peel.

Should Copper Be Coated with Tin?

L. W. Haase, Gesundh.-Ing. 56, 593-5.

THE practice of coating copper water pipes with tin is criticized sharply on the ground that lead impurity in the tin tends to dissolve as an electrolytic circuit is set up, rendering the water unsafe for drinking purposes. The tinning of kettles and other vessels used in cooking would seemingly be open to the same objection. The tin-coating of copper is only recommended where the water supply is very soft, and cold, high in carbonic acid, and low in oxygen.

(Turn to page 56)

Salesmen's Slants . . .

News and Personals from the Men on the Road A Monthly Feature by Franklin, Heiser, Hoffmann

C. RAY FRANKLIN, Speaking from Kansas City

THE Kansas City Jobbers' Association has been quite active recently, so President E. H. Wilson tells me. They have had several state or zone meetings attended by members from four states—Missouri, Kansas, Oklahoma and Texas. Kansas City, because of its central location, receives more than its share of meetings. The jobbers, however, are always delighted to meet in Kansas City, where they dish out that Western hospitality in over-doses.

The jobbers in Kansas City, however, report a slow business the last month, due principally to the extreme hot weather the middle west has enjoyed the past five or six weeks.

The heat this summer throughout the middle-west has been the worst ever recorded, and the country at the time this article was written was baking under a pitiless sun that completely seared the crops and pastures. Cattle and stock have been shot in many localities, due to lack of food and water. Many towns throughout Kansas and Nebraska have baked for 20 to 30 days under a temperature of over 100, without a single day let up.

Here's hoping we have moisture soon, at least to furnish water for the consumption which is badly needed in my localities!

I spent a short vacation in Colorado among the Rockies in an effort to dodge some of the heat. While there I ran into O. V. Sheldon, buyer for the McPike Drug Co., Kansas City, Mo.; Ray Olmstead, who sells Oh Henry! in Colorado, and several other candy men. From what information I have gathered since returning home, practically every member of the Kansas City Candy Club intends to spend a week or more out there during the next few weeks.

E. R. Walker, who represents Mars, Inc., in Kansas City territory, was back on the job in Kansas City last week, after an illness of several weeks. Good luck, Earl; glad to see you back!

Ed Waller, who chases orders out this way for Luden's, attended Charlie Embry's wedding a few days ago. Charlie sells Peter Pauls and Collins in the southwest and was about the last bachelor we had in the Kansas City Candy Club. Ed said the wedding was a swell affair; so swell, in fact, they threw puffed rice. Good luck, Charlie!

Paul F. Beich & Co., Chicago and Bloomington, Ill., held their southwestern sales conference on July 29 in Kansas City, Mo. All their salesmen covering the southwest met here for a four days' conference to lay plans for their fall campaign for business.

These sales meetings held in central points for dif-



C. Ray Franklin Kansas City, Mo.

ferent sections are becoming popular, as more seems to be accomplished by smaller meetings than larger meetings held at the factories.

Harry Sifers, that popular candy manufacturer of Kansas City, Mo., spent several weeks in northern Michigan during the extreme heat. Lucky—I'll say so—to be able to get away and cool off!

Bob Schutter, President Schutter-Johnson Candy Co., Chicago, was in St. Louis a few weeks ago, visiting his customers there, together with his St. Louis salesman. "Do you know," said Mrs. Hoech, of the Hoech Candy Co., "Mr. Schutter is really well educated. Do you know, he told us the first hermit was really a Scotch golfer who sliced his ball into the woods."

My column is short this month, but I have made numerous attempts to complete it, and each location I am trying is hotter than the previous one. As I say Au revoir for this month I am sitting in the basement of the hotel with my feet in a tub of water. Well, it won't hurt my feet, that's sure!

SYDNEY Z. HOFFMANN, Speaking from Chicago

UR Ohio-Michigan correspondent reports that there is a decidedly better feeling in those parts and that the commission checks can no longer be cashed at the Woolworth stores. He informs me that most of the boys now belong to the B. C. C. (Better Commission checks) and they are all joining the S. I. A. (salting it away). Keep it coming, boys, it's been a long drag.

Call a spade a spade—what has happened to the old draw labels, and do the various manufacturers believe they can get away with the new camouflaged ones? You can't change the leopard's spots and you can't fool your old Uncle Sam.

Sydney Z. Hoffmann Sales Representative, Luden's, Inc.



Ed Harsch, that well-known Columbus, Ohio, jobber, has his retail customers guessing. When the Mrs. leaves the place Ed covers up the wares with a large velvet cover and turns down all sales under a dime. If you get to Columbus, run in to see Ed and if you want to see some fireworks, just ask for 5c worth of chocolates. Oh! boy, does he blow up.

Jim Fry, well known in Ohio, etc., was in Detroit last week. Jim now has the Brandle & Smith line for Ohio, Michigan and Indiana. And, should anyone ask you, he is doing fine.

Joe Levi, President of the St. Aubin Country Club (Auto City Candy Co., Detroit), reports that he can out-class any candy man in the country when it comes to fishing and that his 1904 model outboard motor starts when he says go. Ben Lefkowitz, his old side-kick, says he will back Dave Trager against Joe any time, if Joe will reduce the size limit to 3 inches and no baits barred.

Wm. "Bill" Menchan, buyer for Central Fruit and Grocery Co., Mansfield, Ohio, has won everything there is to win with his ducks and game chickens, and it is reported that he and his old side-kick, Scotty Dunlop, have recently purchased a fine yearling trotting horse. Bill will be the official trainer of this blooded steed and will do the work, while Scotty, like the rest of his clansmen, will draw half of the profits—if any. Scotty says Bill owns the front half when the colt is eating and the hind quarter when he is racing. Look out, Bill, and send me the low-down and I will dump a two-spot on him. (P. S., don't forget to send Scotty the bills.)

In case you folks don't know, Mr. Dunlop peddles candy and menthol cough drops for Luden's, Inc.—and is doing a real he-man's job. Good luck to you both on the nag.

Eddie Donnelly, late road hound for the Brandle & Smith Co., is now sales manager for the Quaker City Candy Co., Philadelphia. Eddie was on the road lately and telling everybody about his garden. He says everything is doing nicely except the rhubarb—but what the 'ell, we don't like that fruit, anyway! Go to it, Ed, as all your friends are pulling for you and want to see you make good with your new job.

Query No. 1—How low can gum drops go in price? Query No. 2—If a hen and a half laid an egg and a half, etc?

Well, the answer to the gum drop question is the same. Nuf sed.

There is a certain Chicago jobber whose finger nails

are manicured by his stenographer—at regular intervals. Oh, well, such is life, and it's a living.

The Chicago Candy Club now has a home all its own -where out-of-town guests can come and rest their weary bones and meet their friends calling on the Chicago trade. The new location is Maryland Hotel, 900 Rush street. This hotel is a swell place on the new north side of Chicago, handy to the loop and all the night life (if you have any money to spend). In the dining room is a special round table reserved exclusively for candy men, where they can enjoy a good meal at reasonable prices. While partaking of the food you can discuss your problems with the men who have the same troubles. Ben Lindberg, President of the Chicago Candy Club, deserves a big bunch of roses for his untiring efforts to better the candy smiths' road here in Chicago and elsewhere.-Congrats, Ben, and if the Oh! Henry people think as much of you as the club members, everything will be hotsy totsy.

John Poole, the Chicago Pilot for National Chicle Co., and Sky Bird gum, is out with a new penny picture piece called "Batter Up"—something new in picture gum. As the ball players are in the cu.out form and the kids are going for it in a big way. Johnny tells me the only trouble is in getting shipments. Good luck, Johnny, with the Batter Up, and regards to your boss, Al Livingston.

Louis Leckband is back again with Schutter-Johnson Corp. Good men can always go back. Already I see more of S. J.'s good in the jobbers' stock. They can't resist Lou—congrats to you both—it's a good hook-up.

Peter Paul Co. has given the trade a natural in a new bar they call "Dreams" and what a good eater it is. That bar in my humble mind is going places and do things. The broker is Clarence Meister, of Smith Brothers fame. I even give my cough drop competitor a break. Clarence is a regular fellow and should have a plug now and then.

GEORGE J. HEISER. Speaking from Atlantic City

George J. Heiser Sales Representative, American Caramel Co.



N my last trip to Pittsburgh, at the Fort Pitt Hotel, when I signed my own John Hancock to the Register, the clerk said, "I have the best room in the house open for you, as Ike Diamond has just checked out of 669," so I was assigned to this wonderful room. On entering I found plenty of copies of orders scattered around on the floor and on looking in the dresser drawer I found a flock of bats. So I called the manager, Will Morris, on the phone, telling him there were a flock of bats in the room, forgetting to mention they were Fair Play bats. In less than the "shake of a lamb's tail" there stood the big boss and a

(Turn to page 57)



Questions addressed to this department will be answered by us from month to month. Readers are invited to make this a forum for informal discussion of subjects of general interest to the candy industry.—The Editor.

Before and After

Dear Editor:

"This will serve to introduce Mr. C. V. Olding, Melbourne Factory Manager of Life Savers' (Aust.), Ltd., who is on a business visit to the United States. He is a very prominent and representative member of the trade in Australia. . . . It may be that he may require a little information regarding the trade in your city and any assistance or little courtesies that you can extend to him will be greatly appreciated."-J. R. Wallan, Managing Editor, Australasian Confectioner, Sydney, Australia.

Dear Editor:

My very pleasant visit to this country is now drawing to a close, as I expect to leave Los Angeles on Wednesday on the return journew to Australia, and after having visited most of the large cities I feel that I could not possibly go away without first expressing my sincerest appreciation for all you did for me during my visit to Chicago.

As the result of your efforts, I met some of the finest people in the trade during my visit to your city, and the friendships which I hope I have made should prove of considerable value in the future.

I will certainly take back with me very happy recollection of the very cordial reception extended to me by both Mr. F. A. Bunte and Mr. O. Schnering of Curtiss. I sincerely hope that in the near future they will find fit to visit Australia, I can assure them that a similar welcome will await them.

Should you be visiting these firms I would appreciate it if you would kindly convey to these two gentlemen my very best regards, and my assurance that their good feelings toward the trade in Australia will be conveyed to my Association when I get home.

With your permission it is my intention to donate a cup for our next golf tournament, and call it the "Chicago Confectionery Buyer Cup" just as a mark of appreciation.

My visit to New York was very enjoyable; I took part in the Convention Golf tournament, and also attended the banquet at which the cocktails were more plentiful than were good scores at the golf.

With very kindest regards, C. V. Olding, Manager, Life Savers, Ltd., Sydney, N. S. W., Australia.

Values "Buyer" Article Dear Editor:

I want to tell you how much I enjoyed and how I valued the article "Here's How a Chain Buyer Buys," in the June issue of The MANUFACTURING CONFECTIONER.

I have read it very carefully and passed it along to heads of different departments and am sure it will prove of great value to all who are interested in securing more of this class of business."—
Illinois.

Eddington Scores a Hit

Gentlemen:

"We have read with great interest several articles appearing in your magazine by Mr. Eddington,

"Mr. Eddington is a very good friend of ours and, of course, that also helps in making his articles more interesting from a personal angle.

"No doubt they will be a great help to many manufacturers in the confectionery business."—Illinois.

Reply

Thanks for expressing your interest. Next month Mr. Eddington will head a forum discussion on "A Good Standard for a \$1.00 Per Pound Package." Why not send us your suggestion?

Candy Clinic Serves

Dear Editor:

"We wish to thank you for your courtesy in publishing in the 'Clinic' of your May issue an analysis of our—chocolate package."—New York.

Wants Whistle Machine

Dear Editor:

"Can you tell me whether or not a hard candy machine is made in this country for making hard candy whistles? I have seen such a machine in Europe, but not over here. I am anxious to obtain such a machine as scon as possible." (Name upon request.)

Likes Eddington Articles

Dear Editor:

"I have enjoyed very much the articles by Mr. Eddington appearing in The Manufacturing Confectioner, and trust there are more to follow."—New York.

Reply-

We appreciate your favorable comment, which is similar to many we have received. Mr. Eddington has consented to continue his discussions on various production subjects from the viewpoint of the practical candy maker. He has received many letters of comment and a few containing suggestions. These are very welcome, and others are invited to write their views.— Editor.



Pectin Jelly Candy Creating Plus Business

Candy manufacturers are daily finding that Pectin Jelly Pieces are creating new customers for them. This new business means increased profits.

Manufacturers who have not included Pectin Jelly Candy in their assortments should investigate.

Pectin Jelly Candies are popular with every consumer.

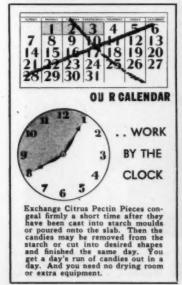
Pectin Jelly Candies give you another selling advantage, namely, a new and increasingly popular item — and — Pectin Jelly Candies add profits.

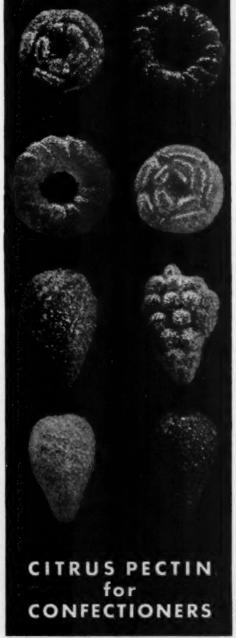
Six Quality Advantages
Pieces made the Exchange
way are clearer and more
sparkling.

They are truer to taste, because citrus pectin allows the full development of the flavor used.

They are more tender, because citrus pectin makes a short jelly.

They are more refreshing, because any desired degree of tartness can be added.





Exchange Pectin Jellies, whether tart or sweet, can be depended upon for excellent performance in packing, shipping and handling.

And they stay fresher - longer.

Send for Samples, Formulas
The illustrated pieces from
the Exchange Experimental
Candy Factory demonstrate
these superiorities. Send
coupon for free samples and
formulas. Your name will be
placed on the list to receive
future samples as well.





CITRUS PECTIN for CONFECTIONERS

CALIFORNIA FRUIT
GROWERS EXCHANGE
Products Dent Sec 208

Products Dept., Sec. 208, Ontario, Calif.

Send immediately samples and formulas of the "Assortment Pieces." Also put me on the list to receive future developments of the Exchange's Experimental Candy Factory.

Name

Firm

Street

City

What's New

With the Associated Industries

Freydberg Bros. Occupy New Quarters

FREYDBERG BROS., INC., manufacturers of Cello Ribbon, have moved their factory and offices from 11 West 19th Street to 45 West 18th Street, New York, where they are amply equipped to take care of their expanding business. The new factory is considerably larger and a great deal of additional space is devoted to new machinery for the making of Cello Ribbon. Richly appointed executive offices and show room further enhance the attractiveness of the company's new location.

William Lohr Heads the Nulomoline Co. James A. King and R. S. Taussig Both Elevated to Vice-Presidents

THE Board of Directors of The Nulomoline Company has announced the following promotion of officers:

William Lohr, formerly Vice-President, was elected

James A. King, Sales Manager of the company, and R. S. Taussig, Manager of the Chicago office, were both elevated to the positions of Vice-President.

Mr. King will continue in charge of Sales and Service operations, while R. S. Taussig will have charge of Chicago territory operations.

"These men," said C. W. Taussig, Chairman of the Board, "have earned promotion, as shown by the progress which the company has made under the direction of their departments. Their broader responsibility and authority in directing the firm's business will facilitate a more extensive Nulomoline Service to the industry."

The newly elected officers assumed their new duties on July 1. The balance of the official slate of The Nulomoline Company, elected at the meeting of the directors, is as follows:

Clarence E. Heath, Secretary; Charles Levy, Treasurer; Samuel Gartner, Assistant Secretary; Edith V. Vyner, Assistant Treasurer.

Cocoa and Chocolate Manufacturing Industry Code Authority Approved

NRA approval has been extended the code authority for the cocoa and chocolate manufacturing industry. Its members are:

John A. Bachman, Bachman Chocolate Manufacturing Co., Mount Joy, Pa.

Wellington S. Crouse, Hershey Chocolate Co., Hershey, Pa.

Ernest D. Fieux, Runkel Bros., Inc., New York.

Clive C. Day, Peter Cailler Kohler Swiss Chocolate Co., New York.

Alfred Ghiradelli, D. Ghiradelli Co., San Francisco. Wallace T. Jones, Rockwood & Co., Brooklyn, N. Y.

Mr. Drury represents those of the industry who are not members of the Association of Cocoa and Chocolate Manufacturers of the United States.







NEWLY CHOSEN NULOMOLINE OFFICERS—William Lohr, new President of The Nulomoline Company, above at left, who was advanced from vice-presidency last month. With him is James A. King, elected Vice President and continuing as Sales and Service Manager. At the right is R. S. Taussig, likewise elected Vice President, who is in charge of Chicago territory.

CHOCOLATE FAT-BLOOM....

Do you know what it is and How To Prevent It?

For the first time the complete story of chocolate fatbloom has been written and published in the form of a monograph by the man who was responsible for the first scientific paper on the subject, in the Journal of the Society of Chemical Industry in 1927. The Author has been called in to cure more cases of fat-bloom than any other one person. Order a copy now of his latest and most valuable contribution to the literature of the industry....

"THE PROBLEM OF CHOCOLATE FAT-BLOOM"

A technical and practical monograph

ROBERT WHYMPER

(Author of "Cocos and Chocolate: Their Chemistry and Manufacture," 2 Editions; "Cocos and Chocolate" in the standard work—Allen's Commercial Organic Chemistry," 3 Editions, etc.)

The book is divided into two sections: Section I deals with a full scientific and technical discussion of chocolate fat-bloom; Section II tells the practical chocolate man in simple language how it may be prevented. Contains reproductions of 2 photo-micrographs illustrating 2 forms of chocolate fat-bloom; 14 charts of solidification curves, viscosity curves, etc.; 2 figures illustrating a simple solidification curve and the changing melting points of cacao butter.

Published by

THE MANUFACTURING CONFECTIONER PUBLISHING CO. 1140 The Merchandise Mart, Chicago, Ill.

The Manufacturing Confectioner Publishing Co., 1140 The Merchandise Mart, Chicago, Illinois.	Date
You may reserve	he Problem of Chocolete Fat
(Price in U. S. A\$2.50 per copy. Foreign-\$3.00)
Mail copy to: Name	

USE THIS COUPON

Everett Machine Corporation Handling Bag Sealing Equipment

The Everett Machine Corporation of New York has just been appointed New England distributor for the Sealtight Cellulose Bag Sealing Machines manufactured by the Heat Seal-It Company of Philadelphia. These machines will be handled in addition to their Everett Automatic Sheeters for Cellophane.

American Machine & Foundry Co. to Handle Rose Machines

EFFECTIVE as of June 29, 1934, Rose Brothers, Ltd., of Gainsborough, England, have completed arrangements for the American Machine & Foundry Company to be their Sole Agents in the United States and Canada, for the sale of their complete line of Confectionery Machinery, in addition to their Cellophane Wrapping-Cartoning-Weighing-Filling and Packaging Machinery.

Sales and Service Departments are being so organized to assure all users of Rose Machinery of quick and dependable service. Headquarters of the American Machine & Foundry Company, 511 Fifth Avenue, New York, N. Y.

Rockwood Adds to Sales Force

ROCKWOOD & CO. announces the appointment of Elmer R. Kratt as Divisional Sales Manager in the territory including Michigan, Ohio, Western New York and Western Pennsylvania. Mr. Kratt for many years represented Wilbur-Suchard.

J. B. Wine has been appointed Philadelphia representative. Mr. Wine, who for over 30 years was connected with Wilbur-Suchard, will call on the confectionery jobbers in Philadelphia, Camden, Chester and Wilmington.

Research Program of Corn Refiners May Aid Confectioners

WITH its center of activity recently transferred from Indianapolis to New York City, the Corn Industries Research Foundation, trade body of the corn refining industry, is in the midst of a series of research projects which may have considerable effect on the market for the sugars, syrups, starches and other derivatives of corn.

While the exact nature of its technical investigations has not yet been made public, it is known that the Foundation is working in close cooperation with a number of outstanding scientists in several leading colleges and universities and that the research is expected to develop new basic information to stimulate consumption in existing fields and point the way toward possible new uses.

"The confectionery industry in particular," says the Foundation, "should benefit greatly if certain of these projects succeed in establishing scientific proof of nutritional values we believe the public is already getting."

As an indication, apart from their research program,

of the emphasis the corn refiners are putting upon the products used by confectioners, they recently reminded the trade that corn syrup was used in the diet fed to the famous Dionne quintuplets of Corbeil, Ontario. "The diet prescribed for these babies," the Foundation said, "was a mixture of corn syrup, milk and water, a combination that does not differ greatly from the corn syrup, milk and other ingredients used as a basis for innumerable popular candies.

"Physicians, of course, have known the dietary value of corn syrup in infant feeding for years and have educated thousands of mothers to its use, but the public at large has been somewhat slow in identifying corn syrup with the body or sweetening of many of its popular candies."

A pamphlet on this subject, issued by the Foundation, is being distributed through the cooperation of the National Confectioners' Association and may be the forerunner of subsequent material along similar lines.

The Corn Industries Research Foundation is now headed by George M. Moffett of the Corn Products Refining Co. Donald K. David of the American Maize-Products Co. is vice-president and Pendleton Dudley is executive secretary. Other companies sponsoring the Foundation are Anheuser-Busch, Inc., the Clinton Co., the Hubinger Co., the Huron Milling Co., Inc., the Keever Starch Co., Penick & Ford, Ltd., Inc., Piel Bros. Starch Co., the A. E. Staley Manufacturing Co., and the Union Starch & Refining Co.

Administration Member Named to Cocoa and Chocolate Industry Code Authority

Thomas E. Hardenbergh, Jr., New York accountant, has been appointed to represent the NRA on the Code Authority of the cocoa and cholocate manufacturing industry, it was announced recently.

"Short Cuts to Power Transmission"

A new 72-page illustrated text book entitled "Short Cuts to Power Transmission," has just been published by the Flexible Steel Lacing Company. It contains



information on solving ordinary belt transmission problems, a discussion of belting of all types, informative material on the subject of belt joints and good transmission practice, besides a mass of useful associated tables and data. Copies may be secured complimentary by writing to 4607-31 Lexington Street, Chicago.

New Multi-Purpose Seal

A NEW universal sealing compound is called Ideal Perfect Seal. Non-soluble, non-corrosive and nonoxidizing, this new compound, in a paste form, can be spread as thin as .001 inch, seals instantly, yet never hardens or becomes brittle.

It is used in connection with gaskets, or in some cases without them, or as a seal for flanged or threaded joints in fuel oil, steam, water, air, gasoline, lubricating oil or in any type or size of pipe lines. It may be applied on any material or surface, yet permits quick and easy disassembly at any time.

It is supplied in 3 and 8 ounce tubes, 4 pound pails, and in 45 and 135 pound drums.

The product is made by the Ideal Commutator Dresser Co., Industrial Division, Sycamore, Ill.

New Metal Display Sheets

A NEW development in the metal industry of interest to manufacturers and retailers are display materials called Chromflex and Copperflex. They are obtainable in flat or fluted polished or satin finished sheets, or sheets decorated with stripes and squares, and also on plywood or various thicknesses, and on angles and mouldings. The brilliant metal sheets are used in window displays and exhibits of various kinds. The metal does not tarnish and is unaffected by atmospheric conditions, although Chromcopper is recommended for outside use. Chromflex on plywood is being used to embellish the interior of the Ford-Building at the World's Fair.

Leipzig Fair to Aid Efforts to Introduce German Candies into Foreign Markets

A special effort is being made to introduce German candy into foreign markets through the facilities of the famous Leipzig Fall Fair which will be held August 26 to 30 in Germany. More than 7,000 exhibits from 22 countries, including the United States, are expected to attract 100,000 buyers from all over the world. Various industries will be represented.

"Selling Below Cost"

(Continued from page 21)

tempt to do is to establish a bottom level of prices below which one may go, and as such it should move up the general price structure to the point that more companies doing an honest job in their own line line will be able to break even or make some return on their investment.

Ignorance of costs of your own and those of your competitors has been a very great detriment in business. The machinery which you here propose to set up should bring light to your own individual problems and should also bring publicity to the really bad situations which exist. It is a long program and there will be many discouragements on the way. Given a fair amount of cooperation from the industry and the energetic backing of your Code Authority, when established, this part of your program should bring to you one of the few constructive things available under the National Industrial Recovery Act.



HOME-MADE FLAVOR

your customers want!



Because housewives have been using Burnett's Pure Extracts in their kitchens since 1847, they want candy today flavored with Burnett's Vanilla. Only with Burnett's can you capture the home-made flavor that guarantees you plenty of good customers and repeat sales. Made with the attention to extra details that assures uniform, matured vanilla goodness, Burnett's Pure Vanillas are made in three strengths—

FORT MONOGRAM • DREADNAUGHT

Our Service Department is maintained to help you with any flavoring problems. Write us today and ask for price list and specifications.



JOSEPH BURNETT COMPANY

437 D Street, Boston, Mass.





We are all

Going after the consumer's dollar—and it is a tough race unless you can offer something different—something better than your competitor.

That is just where we can help you.



FITS INTO ALL CANDY COMBINATIONS

Let Nulomoline Service be your pacemaker—put you up in the lead with new ideas for your Fall or Holiday lines —and let Nulomoline put quality in every piece you make.

Nulomoline is your insurance that your candies will reach the consumer as fresh and eatable as the day they left your plant.

There is no substitute for Quality—USE NULOMOLINE.

We have formulas for practically every type of candy. Just tell us what you want to make—avail yourself of the knowledge and experience of our Service Staff who are working constantly in your interest.

THE NULOMOLINE CO.

Western Office: 333 No. Michigan Ave., Chicago, I I.

Rolled Cream Centers

(Continued from page 25)

of powdered sugar, but the resulting fondant would not be as acceptable as fondant made by the customary hot process.

In the boiled process, the syrup from which the fondant is prepared is in a supersaturated condition; that is, it contains more sugar than can remain dissolved at ordinary temperature. Hence, the excess sugar crystallizes out as the syrup cools.

The purpose of beating or creaming this syrup is to restrict the growth of these sugar crystals and cause them to be so minute as not to be detectable by the tongue. The fondant is then said to have a smooth consistency. On the other hand, if the agitating or beating is not sufficiently vigorous or the syrup has not been cooled to a low enough temperature during the creaming process, the sugar crystals produced will be so coarse as to be distinctly perceptible to the tongue and mouth, with the result that the candy maker will refer to it as being "grainy" or of a coarse consistency.

The Perfect Cream Center

The ideal fondant may, therefore, consist of very fine sugar particles, each of which is separated from the other by surrounding films of syrup. Since fondant is a solid and a liquid portion, it is important that we consider which of its properties that affect quality are dependent on the solid or crystal portion and which are dependent on the liquid or syrup portion.

Consistency depends upon the solid portion in the sense that if the sugar crystals are too large, the fondant centers feel rough or coarse when eaten. Consistency also depends upon both the solid and liquid portions in the sense that the higher the proportion of syrup the more fluid it becomes. Still another factor determining consistency is the character of the ingredients making up the formula and the temperature to which the syrup used for making the fondant is cooked.

Texture in the sense used here is a property exclusively of the liquid portion, which acts as a binder for the millions of tiny sugar crystals. If the liquid portion is rather thick and viscous, the fondant has a tough or stringy, or, shall we say, stretchable texture, whereas if the syrup is only of moderate viscosity the fondant will be short or of tender texture.

The perfect cream center should, therefore, be of tender texture, smooth consistency and non-fermentable.

The process for making rolled cream centers has taken many years to develop to its present state of perfection, and I believe when comparing the progress made in other divisions of candy making that there has been greater scientific and economic advance made in the cream center department than in any of the others.

I do not wish to discount the notable improvements made by manufacturers of materials used in jellies, marshmallow, caramels, etc., but I should like to emphasize that the solving of the problem of fermentation in fondant cream centers—baffling as it was for so many years—was in a large measure achieved by the

scientific curiosity, ingenious skill and experience of that Peer of Candy Makers, James P. Booker.

Jim Booker blazed the way for the scientific investigations made by Dr. Max Schneller, a scientist who has devoted many years to the study of candy problems.

It was Dr. Schneller who evolved the theory and later made tests which proved that the density of the syrup present in all fondant centers should be increased and controlled to prevent the growth of torula wild yeasts—if fermentation were to be eliminated.

Exhaustive research conducted by Dr. H. S. Paine and his co-workers, so brilliantly executed and clearly presented to our industry, is worthy of special mention, and to these gentlemen may full credit be given.

Whitman's Sales Convention Reveals Sales Increase in Higher-Priced Candies

THE complete sales force of Stephen F. Whitman & Son, Inc., recently assembled in Philadelphia for their first national sales convention since 1931. Sectional conventions have been held in the intervening years, but with improving business conditions, Mr. Louis L. McIlhenney, President of Whitman's, felt the time was ripe to bring every member of the sales force to Philadelphia.

Advertising and sales plans for the coming year were described to the salesmen who had come from every state in the Union.

Mr. McIlhenney emphasized the importance of the higher quality and higher priced lines in a speech which revealed some surprising figures in regard to retail candy sales. Taking his figures from a survey recently made in hundreds of retail stores, Mr. McIlhenney told the covention that while it was found that 42 per cent of the total poundage of candy sold in the stores surveyed during a two weeks' period was retailed at one dollar a pound or less, the total dollar volume of this cheaper packaged candy amounted to only 26 per cent of the stores' candy business. Dollar volume in packaged candy and the real profits, as Mr. McIlhenney pointed out, were in the higher-price-per-pound brackets where the bulk of Whitman's sales is made.

The salesmen were enthusiastic about the increase shown by 1934 sales over that reported for a corresponding period in 1933, and voluntarily pledged an even larger percentage of increase for the fall and winter business. All the salesmen are convinced that there is a definite swing to the higher priced and higher quality candies.

In order to take the fullest possible advantage of the anticipated upswing, it was announced that the advertising program would be substantially increased. Whitman's Chocolates have been consistently advertised since 1842 when Stephen F. Whitman started the business in Philadelphia. Early records show that nearly a century ago Whitman's was the only candy being advertised in Philadelphia and today it is the leading candy advertiser of the whole country. The increased schedule, as announced at the sales convention, will include nine of the country's most widely circulated weekly and monthly magazines.

Stimulate Fall Sales With Rewards to Your Dealers

You can stimulate fall sales on your complete candy assortments—by offering the dealer worthwhile utensil prizes which he will be proud to take into his home.

THE WATERLESS COOKER

Cooks an entire meal over one burner turned low. Practical and economical—food shrinkage reduced to minimum when cooking the waterless way. Retains natural juices and food elements. Made in heavy polished aluminum in all popular sizes.



LARGE OVAL ROASTER-171/4"x12"



Many times a year every family has need of a large roaster. This one is of heavy aluminum and can be used for top-stove roasting. Rotary vent for browning. Tight-fitting cover conserves natural flavors. An excellent reward any dealer would be glad to get.

NEW FRENCH FRYER for Preparing Delicious Varieties

Something entirely new which will prepare crisp and full-flavored French-fried foods. Special thermometer insures accurate temperature control—the secret of golden brown and appetizing varieties. All aluminum basket and fryer.



Send for plans on stimulating complete candy assortment sales—also our catalog and quantity discounts on prizes and rewards which appeal to the dealer!

WEST BEND ALUMINUM CO.

Dept. 858

West Bend, Wisconsin

LOWER WRAPPING COSTS with EVERETT AUTOMATIC SHEETERS for CELLOPHANE

This Model "C" Automatic Sheeter for Cellophane soon pays for itself out of savings made possible through its use. Many candy manufacturers have already found this to be the case. By purchasing in rolls for sheeting to size, reductions up to 25% of their original paper costs have been made. The Everett Sheeter is extremely simply and economical to run—requires no operator. It will accurately cut and stack roll stock in

any desired size.

May we tell you more about this moderately-priced, moneysaving device?

AMONG THE USERS OF EVERETT MACHINES ARE: MACHINES ARE:
Paul F. Beich Company
Fine Products Corp.
The Gobelin Co.
Wm. M. Hardie Co.
King Candy Co.
Luden's, Inc.
New England Confectionery Co.
Overland Candy Co.
Page & Shaw Co.
Quaker City Choc. Co.
Rockwood Choc. Co.
Sperry Candy Co.
... and many others

MODEL "C" TYPE"

Will handle rolls from 1" up to 26" in width and deliver theets from 3" up to 26" in length. Has a typed of from 4,200 up to 5,000 theets per hour. Production can be materially increased if necestary.

EVERETT MACHINE CORPORATION

817 BROADWAY

NEW YORK, N. Y.

Acme" Starch Trays



When ready for more Starch Trays, call or write us for prices.

All trays made from kiln dried basswood and surfaced to a smooth finish.

Quality and service at minimum price

Rathborne, Hair & Ridgway Co. Chicago, Ill,

2138 South Loomis St.

SEAL CARDS

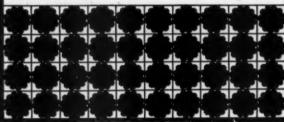
A Brand New Line More color and more Flash

Send for Circular

CHAS. A. BREWER & SONS

The Largest Bo. ard and Gord House in the World 6320-32 Harvard Avenu

Chicago, U. S. A.



The Candy Clinic

(Continued from page 40)

entirely too weak. Butterscotch tasted as if a flavor was used which left a sour taste in the mouth. Box is packed neatly and makes a good appearance when opened, but some. of the candy is not up to standard.

Code 8W 34

Summer Pack-1 lb,-60c

(Purchased in a retail candy store, San Francisco, Calif.)

Appearance of Box: Good; one-layer, buff color, brown grass ribbon used, amber color Cellophane wrapper,

Appearance of Box on Opening: Good; all pieces wrapped in wax paper and

in good condition.
Soft Coconut Taffy: Good. Molasses Nut Chew: Good. Soft Butterscotch Wafers. Good. Licorice Taffy: Good. Licorice Caramel: Good. Coconut Paste and Jelly: Good. Pistachio Nougat and Chocolate Caramel: Good.

Strawberry Nut Nougat: Good. Almond Nougat: Good. Caramel and Taffy Whirl, Peppermint

Kisses: Good. Jelly and Taffy: Good. Molasses Kiss: Good.

Vanilla Caramel and Nougat: Good. Chocolate Nougat and Caramel: Good. Assortment: Good.

Remarks: This is one of the best summer boxes of candies examined by the Clinic this year. The candy is of good quality and well made. Cheaply priced at 60c the lb.

TRADE MARKS

for Registration

THE following list of trade-marks published in the Patent Office Gazette for the past month, prior to registration, is reported to The Manufacturing Confectioner Publishing Co., by Mason, Fenwick & Lawrence, Patent and Trade-Mark Lawyers, Woodward Building, Washington,

Manufacturers and dealers in candies, confectionery and baking products who feel that they would be damaged by the registration of any of these marks are permitted by law to file within thirty days after pub-lication of the marks a formal notice of opposition.

DROMEDARY, for fruit cake mixtures and gingerbread mixture. Use claimed since September, 1932, by The Hills Bros. Co., New York, N. Y.

MOLASSES 'N' JANUARY, candy. Use claimed since Jan. 2, 1934, by M. J. Holloway & Co., Chicago, Ill.

COKETTES, malted cocoa tablets. Use claimed since Jan. 18, 1934, by Otis Clapp & Son, Inc., Boston, Mass. NESTLE'S, cocoa, prepared choco-late in form of small bits or particles and chocolate syrup. Use claimed since 1931 by Lamont, Corliss & Co., New York, N. Y.

FRISK-E, ices, frozen fruit-flavored ices and ice cream. Use claimed since Jan. 15, 1932, by Philip J. Sportolari. doing business as Sportolari, Inc., Pittsburgh, Pa.

WHIZ, candy. Use claimed since August, 1919, by Paul F. Beich Co., Bloomington, Ill.

GRAND SLAM, ice milk product. Use claimed since May 1, 1933, by Mc-Dowell & Eddy, Los Angeles, Calif.

VITEX and design, pies, doughnuts, cookies, chocolate, etc. Use claimed since Feb. 14, 1934, by National Oil Products, Harrison, N. J.

PILGER'S OPERA BAR, confectionery, specifically candy bars. Use claimed since March 25, 1933, by Jo-seph Pilger, Covington, Ky.

DEL CREST, ice cream. Use claimed since April 14, 1934, by Delcrest Dairies, Inc., East Orange, N. J.

LIQUI MINTS, candies. Use claimed since May 11, 1934, by Donald A. Cummings, doing business as D. A. Cummings Co., New York, N. Y.

TURBAN, nuts in shell, prepared almonds, nuts or kernels thereof shelled, etc. Use claimed since March 19, 1930, by Field & Co., Fruit Merchants, Ltd., London, Eng.

TEMPLE GARDEN and design, cocoa and other foods. Use claimed

cocoa and other foods. Use claimed since Feb. 1, 1909, by Maury-Cole Co., Memphis, Tenn.

Sobel Vice-President Nutrine Candy Co.

MAX SOBEL, well-known executive in the candy industry and treasurer of the Code Authority, has accepted the position of Executive Vice-President of the Nutrine Candy Company, and the Superior Candy Company, Chicago, Ill. Both firms are operating at the same address, 419 W. Erie Street.

Mr. Sobel was formerly Vice-President of the Schutter-Johnson Candy Corp., and he served the General Candy Corp., also of Chicago, in the same capacity.

F. H. Rawls New Chief of Foodstuffs Division, U. S. Dept, of Commerce

Dr. Claudius T. Murchison, Director of the Bureau of Foreign and Domestic Commerce, has announced the appointment of Fletcher H. Rawls of Winston-Salem, North Carolina, as Chief of the Foodstuffs Division of the Bureau, succeeding E. G. Montgomery, who is now on special research work with NRA. The confectionery industry surveys will be under the direction of Mr. Rawls.

Mr. Rawls has had a long specialized experience with food stuffs. For nine years he was in Central America and Cuba in the production and exportation of bananas, sugar and other tropical food products. He was associated with the United States Sugar Equalization Board, New York City, during the period of government control of sugar, 1918-1919, during which time he conducted investigation in Northern Europe, including Russia. Since 1920 he has been engaged in the manufacture and distribution of food products in the South.

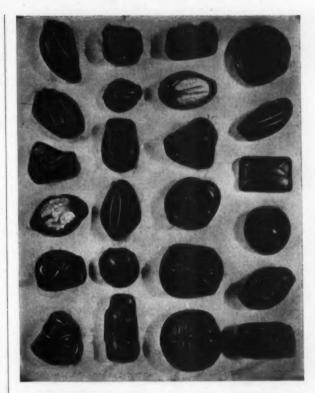
Mr. Rawls has requested The Manufacturing Confectioner to extend his cordial invitation to members of the industry to make full use of the Food Stuff Division's facilities and to feel free at all times to let him know how the division can more effectively serve them.

Hearing Set on Wholesale Confectioners' Code Budget of \$500,000

PUBLIC hearing on a proposed budget of code expenses for the wholesale confectoners' industry will be conducted on Monday, August 13, in the Mayflower Hotel, Washington. NRA Deputy Administrator Irwin S. Moise will be in charge.

The budget totals \$500,000 for the period from June 6, 1934, to May 30, 1935. It is proposed to have each member of the industry contribute one-fourth of one per cent of his sales toward the code budget. In cases where sales cannot be determined the volume purchased plus 20 per cent will be used as the basis. All firms handling confectionery at wholesale will be required to contribute to the code fund, whether or not confectionery is the major item of their trade.

Of the total budget of \$500,000, only \$124,300—less than one-fourth—is to be used by the National Code Authority. The principal items proposed in the budget for that body are \$22,100 for salaries, \$12,900 for office expenses, \$15,000 for Code Authority traveling expenses, \$24,000 for traveling expenses of state supervisors and members of regional code authorities, \$10,000 for research, investigations and arbitration, \$13,000 for organizing local code authorities, and \$11,400 (10 per cent of the total expense) as a reserve.



THE confectioner who is particular about the quality of the ingredients he uses for his centers will be equally wise in insisting on Hooton's Chocolate Coatings to cover them. For these coatings are outstanding in consistent uniformity of goodness. In texture, flavor and color they meet the requirements of the most exacting. Nowhere will you find chocolate coatings of finer basic quality. We should like to send working samples.

HOOTON CHOCOLATE CO. NEWARK, NEW JERSEY.

WAREHOUSES LOCATED AT
CHICAGO DETROIT TOLEDO CLEVELAND





WRAPPING MACHINES

Ideal Wrapping Machines were designed to meet the needs of those large and small manufacturers whose requirements demand rapid handling along with dependable and uninterrupted operation. The service record of every IDEAL sold proves the absolute reliability of this equipment. Each machine carries our unqualified guarantee that it is mechanically perfect.

Two models are available. The Senior Model which wraps 160 pieces per minute and the Special Model with a capacity of 240 pieces per minute.

Candy manufacturers will find these machines excellently adapted to their most exacting requirements.

Write for complete specifications and prices.



IDEAL WRAPPING MACHINE CO.

EST. 1906 MIDDLETOWN, N. Y. U. S. A.

"Break and Take" Packages Forbidden Starting with July 30th

"Break and take" packages of candy were forbidden after July 30 by the NRA, under the codes for the candy manufacturing and wholesale confectionery industries.

Prohibitions of the so-called "break and take" or "pick and draw" packages in which a lottery element is present were contained in the codes when they were approved, but their application was stayed because the industry appeared divided on the subject. A public hearing was held on the question on July 10, at which it appeared that only a minority favored continuance of the practice. The ruling was announced on July 23.

The interval granted until July 30 before the code provisions went into effect was to enable stocks to become exhausted.

Sugar Tax to Approximate \$64,760,000 Annually

THE proceeds from the processing tax assessed on sugar will approximate \$64,760,000 on a yearly basis, according to the Statistical Department of Lamborn & Company.

Domestic sugar beet and sugar cane growers will receive approximately \$20,000,000 of this tax as benefit payments under the adjustment program provided for by the Agricultural Administration. Under the act, President Roosevelt has authority to distribute the balance remaining to the various insular possessions for the benefit of agriculture generally.

Current Technical Literature

(Continued from page 43)

The Dehydrating Effect of a Carbohydrate —Poor Diet and Its Practical Utility



D. Adlerberg and O. Porges. Klin, Wochschr. 12, 1446-50.

A DIET low in starches and sugars causes a retention of water in the tissues, primarily the skin. A diet deficient in these elements causes a drying out, which may be of value under certain diseased conditions which the authors mention. (A healthy skin is the aim of every woman. To the extent that a carbohydrate diet may be instrumental in preserving skin freshness and loveliness, a possible tie-in of candy with skin beauty might be worked out. It is worth some study. —The Editor.)

A New Color Reaction for the Micro-estimation of d-fructose

Kichinosuke Yamada. Japan. J. Med. Scr. 11. Biochem. 2, 93-105.

A METHOD of determining levulose (fruit sugar) which is superior in simplicity and definiteness to the methods now in use depends upon the use of a French dye (M—Benzamid-semicarbazide) which forms characteristic compounds with sugars.

Salesmen's Slants

(Continued from page 45)

bunch of servants, wanting to clean up on the bats. I told them I did not mind having to sleep in the same bed that Ike Diamond did but I did object to having them ring the whole Fair Play Caramel Co. in on me. . . . Nay, Nay?

You boys who make Grand Rapids, Mich., have you tried the new air floating mattresses provided by His Honor Tom Luce at the Mertens Hotel? Roland Plate, on his last trip, wanted to take one of the mattresses along to Chicago so he could demonstrate to his Chicago friends how it felt really to get a good night's rest

Jack Schroeder, Toledo, Ohio, tamous broker, is so taken up with Fan Tan gum that he is taking lessons in Fan Dancing. Tells me if he can learn to do the Fan Dance he will be able to put on a little act on his calls that will not only sell the jobber, but they will stay sold.

Good Gosh, Leonard Sire, not the big shot sire, is practicing the wedding march, nightly in Greenwich Village, in little Old New York. It is rumored that Leonard is about to make the march to the altar with one of New York's fairest. Here's hoping Len will not stub his toe.

Eddie Maier, Northwest Cone Co., impresario, better known as "Little Nemo," did so much biz in Detroit, that to spend some of his millions he bought a new Hudson.

He's in the money now. Lou Bunky Berke, who is getting thinner every day, when asked if he was on a diet, he shouted back, "No, I'm so busy writing orders for Walter Johnston Candy Co., can't find time to eat."

W. H. Wagg, Louisville, Ky., fast and furious jobber, tells me a bottle of gin was the first prize at a card party he attended, but he won the second prize. Just ask Wig Wag what the second prize was?

Gus Wildey Miller, who had been with Catabwa Candy Co. long before Rip Van Winkle took his little nap, is the same wild one, writing them up by the car. What sez you, big boy?

Handsome Eddie Hollander, who when not in a loving mood gives out orders to the clan who call at the Columbus, Ohio, branch of the Amster Kirtz Co., is about to get into "double harness" with one of Cleveland's prize-winning beauties. Here's hoping he will spend a part of his honeymoon at God's Paradise—Atlantic City—so I can give him some tips on "how to be happy though married." I've had 30 years of experience and am still on a honeymoon.

Au revoir-G. J. H.

The seventh annual convention and exposition of the National Food Distributors' Association will be held at the William Penn Hotel, Pittsburgh, Pa., August 12 to 16. Some confectionery manufacturers will exhibit at the show, attended by the Store-door Delivery Distributors.



AGENTS:

ATLANTA—The Ison Company
BALTIMORE—Harry Whitmore
BOSTON—R. H. Harding
CINCINNATI—Edw. T. Klum & Son
DALLAS—Oliver Taylor Company
DENVER—Cosner Selling Company
FORT WORTH—W. D. Brown Company
LOS ANGELES—Mailliard & Schmiedell
MILWAUKEE—A. D. Schinner Company
NEW YORK—Harmon Sales Corp.
New York—Telephone Mo4-3128
OKLAHOMA CITY—J. H. Case Brokerage Co.
PHILADELPHIA—E. K. Lay Company
PITTSBURGH—J. M. Nichol Company
PORTLAND—Mailliard & Schmiedell
ST. LOUIS—Pilkington Brokerage Co.
SALT LAKE CITY—Western Sales Agency
SAN FRANCISCO—Mailliard & Schmiedell

WAREHOUSES:

SEATTLE-Mailliard & Schmiedell

Atlanta
Boston
Chicago
Cincinnati
Dallas
Los Angeles

Milwaukee New York Philadelphia Pittsburgh Portland (Ore.) San Francisco Seattle

IMPERIAL WOOD STICK CO.

411 GRAYBAR BUILDING

NEW YORK CITY





THE AMERICAN VEGETABLE-SHORTEN-ING INDUSTRY: ITS ORIGIN AND DEVEL-OPMENT—This book of 359 pages is devoted to those manufactured solid fat products other than pure lard which in America are used in cookery. Published by Food Research Institute, Stanford University, California.

MANUAL OF WELDING AND FABRICAT-ING PROCEDURES FOR STAINLESS INGA-CLAD CLAD STEEL—Typical applications of the use of stainless clad steel in the food, baking, canning and confectionery industries. Issued by Ingersoll Steel & Disc Co., Chicago, Ill.

DUREZ BOOKLET—On the use of plastics in packaging. It covers the use of molded plastics in boxes, jars, caps, display stands, etc. Copies are available at the General Plastics, Inc., North Tonowanda, N. Y.

HERSEY STARCH CONDITIONERS AND DRYERS FOR CANDY MANUFACTURERS—An illustrated booklet giving valuable information about conditioning of starch and related subjects. Issued by Hersey Manufacturing Co., South Boston, Mass.

JULY-AUGUST PRICE LIST AND CATALOG

—New 16-page price list of flavoring materials, essential and terpeneless oils, ethers, etc., just issued by Polak's Frutal Works, Inc., 350 West 31st Street, New York City. Copies free on request.

AROUND THE UNITED STATES WITH LAMHORN & COMPANY, INC.—A map showing the U. S. sugar refiners, U. S. Beet Sugar companies, Louisiana cane sugar factories. Issued by Lamhorn & Company, Inc.

ACTUAL LEXIN TESTS—A series of charts showing Lexin benefits for chocolates and confections. Issued by The American Lecithin Company, Atlanta, Georgia.

THE PUREST INGREDIENTS—A folder telling of Lexin as an ingredient of chocolates and confections. Issued by the American Lecithin Co., Atlanta, Ga.

POLAR WATER STILLS—A catalog giving the art of water purification, the needs and how to accomplish it, and other data pertaining to Industrial and Laboratory tests of Polar Water Stills. Issued by U. S. Bottlers' Machinery Co., Chicago, Ill.

Are You Looking Over Someone's Shoulder?



Is One Copy Enough?

One copy of the industry's only specialized, technical magazine on information and news of interest to the manufacturer is enough for one person, yes . . . but not for the major executives of the plant. Presidents, buyers, sales managers, superintendents and their assistants should all have personal copies of their own. When somebody wishes to borrow your copy—don't take a chance on not having it returned. Instead refer him to the subscription department of The Manu-UFACTURING CONFECTIONER. You'll be doing him a favor!

Has Your Subscription Expired?

■ If it has, you'd better renew it now, so you will be sure to get the MANUFACTUR-ING CONFECTIONER every month. Otherwise you might miss some information of particular value to you. Just send in the coupon below, today!

Are You Keeping Up on Industry Developments?

Production methods, materials, equipment, plant operations, packaging, distribution, sales, merchandising, industry news and developments in each specialized phase of interest to manufacturers—these and other subjects of importance enable you to keep up on industry developments thru the monthly issues of The Manufacturing Confectioner.

Enter your subscription now!

The MANUFACTURING (CONFECTIONER PUB. Co., Chicago, III.	
Please enter my subs 1 year, \$3.00 □;	2 years, \$5.00 [Canadian, \$3.60
Name	********	
Company	Position	
Address		
City		
State	*******************	



Cream centers should be smooth and free from grain.

CONVERTIT provides protection against possible fermentation and drying and your creams can be stored for months. It acts after the centers are coated, insuring just the right smoothness and consistency.

CONVERTIT

Whether you make rolled or cast creams — flowing, plastic, light or heavy — USE CONVERTIT and KNOW that your creams will be right.

CONVERTIT is the pioneer invertase that has stood the test of dependability for years. It is standardized and guaranteed to give satisfaction.

You take no chances when you use CONVERTIT—write for our new booklets giving basic formulas for "hand-rolled" and "cast" cream centers.

THE NULOMOLINE CO.

Exclusive Distributors of CONVERTIT

New York

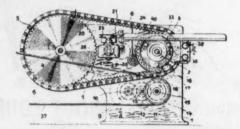
Western Office: 333 No. Michigan Ave., Chicago, III.



PATENTS

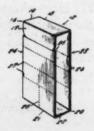
of Interest to Confectionery Industry

1,967,565. Machine for the Production of Bonbons. Hermann Thühlings, Viersen, Germany, assignor to Hansella G. m. b. H., Viersen, Germany, a firm composed of Albert Henkelsen and Otto Pongs. Application September 9, 1932, Serial No. 632,449. In Germany September 12, 1931. 5 Claims. (Cl. 107—15).



1. A machine for forming candy pieces from a rope of plastic sweetmeat by means of stamping tools movably arranged in moulding chambers, wherein the moulding-chamber-halves are mounted behind one another on movable links which in continuous motion unite to form closed moulding chambers while severing the candy pieces from the rope and which after that again become separated from one another, characterized in that the meeting edges of the moulding-chamberhalves are disposed obliquely of the working direction of the stamping dies and in that there have been provided means for forward and backward movement of the stamping die-pairs in their stamping position together with the stamped candy pieces within the moulding chambers and in transverse direction to the movement of the latter.

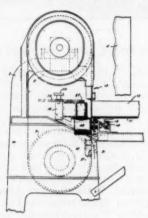
1,966,394. Confection Container. Harry F. Hunnell, Antioch, Calif., assignor to Fibreboard Products Inc., San Francisco, Calif., a corporation of Delaware. Application March 3, 1933, Serial No. 659,551. 4 Claims. (Cl. 229—20).



1. In a container of the class described, a tube, a slide within the tube, said slide comprising a back portion and a front portion and being open at the sides, a bottom connecting said portions, a closure flap extending from upper end of the back, vertically spaced weakened lines in the front and back defining portions to be detached, and a single weakened line extending centrally across the bottom and vertically in the said

portions terminating at the point of juncture with the lowermost of said lines and defining further portions to be detached.

1,965,310. Candy Cutting Machine. Deane M. Freeman, West Newton, and Stacy T. Lyon, Melrose, Mass. Application January 14, 1933, Serial No. 651,740.
 15 Claims. (Cl. 107—20).



2. A machine for cutting nougat candy or the like comprising a frame, a band-knife, pulleys for supporting and driving the knife, a work table disposed adjoining a run of the knife, a manually movable conveyor disposed upon the opposite side of said run of the knife, a support for the table permitting its movement in relation to the cutting edge of the knife, and means interconnecting the table and conveyor to cause a movement of the conveyor in one direction in response to a corresponding movement of the table whereby the conveyor may receive a strip being cut from a slab of candy carried by the table, said means being arranged so that the conveyor remains stationary when the table is moved in the opposite direction.

1,957,789. Chocolate Butter and Method of Making Same. Jerome J. Lyons and Daniel A. Farrell, Chicago, Ill., assignors to John F. Jelke Company, Chicago, Ill., a corporation of Illinois. No drawing. Application May 16, 1932, Serial No. 611,714. 10 Claims. (Cl. 99—11).

1. A food preparation of semi-solid consistency and spreadable at room temperatures comprising a substantially permanent homogeneous emulsion of an aqueous chocolate-bearing material in butter, and an emulsifying agent, the butter being present in the emulsion in a major proportion by weight.

a major proportion by weight.

8. The process of preparing a chocolate-flavored food composition, which comprises emulsifying with butter by means of an emulsifying agent, an aqueous syrup of a chocolate-bearing material, to produce a substantially permanent homogeneous emulsion of semisolid consistency and spreadable at room temperatures.

